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Contents

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Kameshwar Prasad

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Long oral presentations

Long oral session 1: Risk of bias assessment

18818

Reliability and validity assessment of a risk-of-bias instrument for non-randomised studies of exposures

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Background: We modified the risk-of-bias (RoB) tool for non-randomised studies of interventions (ROBINS-I) for use in studies of environmental and occupational exposures (ROBINS for exposures).
Objectives: To assess reliability and validity of ROBINS for exposures through comparison with other tools, external evaluation and integration of results from application of the instrument into the GRADE framework for evidence assessment.
Methods: Two raters independently applied ROBINS for exposures to 7 systematic reviews assessing the impact of environmental exposures on health outcomes. Topic-specific experts reviewed study-level RoB judgments and rationale for accuracy. We determined RoB across the body of evidence for each outcome, integrating that judgment into a GRADE evidence assessment. To determine reliability, 3 raters applied ROBINS for exposures and 3 commonly used RoB instruments for environmental exposure studies (Newcastle-Ottawa Scale, and tools used by the National Toxicology Programs' Office of Health Assessment and Translation, and Office of the Report of Carcinogens) to a subset of 5 or 6 primary studies within 5 of the systematic reviews. To measure external validity, PhD-level exposure topic-specific experts provided 160 unstructured RoB assessments of the same subset of studies.
Results: Assessment of the 7 systematic reviews did not identify any individual study or body of evidence judged as 'Low' RoB (equivalent to a well-conducted randomised trial). Assessments across the body of evidence for different outcomes demonstrated examples of 'Moderate', 'Serious', and 'Critical' RoB. Within GRADE, these translated to at least 'Very Serious' RoB and 'Low' certainty in the evidence. We did not identify any examples for which the body of evidence would not be rated down. We will present reliability and validity analyses. Completion of individual study assessments varied from 10 to 60 minutes depending on instrument and study.
Conclusions: Examples from the application of ROBINS for exposures to environmental studies can inform and guide systematic review and guideline developers, increasing the transparency and rigour of the evidence assessment.

19162

Algorithms for reaching risk-of-bias judgments in randomised trials

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Background: The Cochrane risk-of-bias tool for randomised trials is widely used. Evaluation of the tool in 2010 identified areas in which improvements could be made for ease of use. Some modifications were made in a minor revision in 2011, and the substantial suggestions have been addressed in a major update of the tool, known as RoB 2.0. Among the suggestions was a request that algorithms be developed to help review authors make judgments about risk of bias within each bias domain. Here we describe how we responded to this request and discuss some implications.
Objectives: To develop algorithms to help users of the risk-of-bias tool for randomised trials reach risk of bias judgments for each domain. Processes and outputs: In the development of RoB 2.0, working groups were formed for each domain of bias, and were first tasked with developing a series of signalling questions. These questions

aim to elicit information about methods, observations and contexts likely to impact on risk of bias. The working groups were then asked to describe how answers to these questions would lead to a judgment about risk of bias. To facilitate implementation, we explored the use of formal-decision algorithms that directly map answers to suggested judgments. This proved challenging, but ultimately successful, and required several signalling questions to be revised so that they comprehensively covered the issues. All questions and algorithms were piloted and revised as appropriate. Discussion and conclusions: We believe that automated algorithms reduce workload for systematic review authors, and should increase the consistency with which risk-of-bias judgments are made across reviews. We emphasise that the judgments proposed by the algorithms must be viewed only as suggested judgments, so they can be overridden by review authors. The algorithms map each combination of possible answers to signalling questions to a unique risk-of-bias judgment. In practice, it is not necessary to answer all the questions to uniquely determine a judgment. This raises the possibility that only a subset of the signalling questions need to be answered.

19164

Extending ROBINS-I for the assessment of interrupted time series and controlled before-after studies

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Background: Problems in the design and execution of research studies lead to concern over the validity of their findings. Systematic assessment of risk of bias in studies is required to draw conclusions about the strength of the evidence for causal effects of interventions on health outcomes. The ROBINS-I (Risk Of Bias In Non-randomised Studies - of Interventions) tool provides a structured approach to assessing risk of bias in non-randomised studies of interventions (NRSI). The tool involves comparison of the NRSI with a theoretical, perfectly conducted, randomised-controlled trial. Risk of bias is assessed over seven domains, with judgements guided by responses to signalling questions. The published tool and guidance focus mainly on studies with a cohort-type design. However, the NRSI designs most commonly included in Cochrane Reviews are interrupted time series (ITS) and controlled before-after (CBA) studies. Objective: Adapt the ROBINS-I tool, including its signalling questions and accompanying guidance, to assess risk of bias in ITS and CBA studies.
Methods: Working groups considered risks of bias specific to ITS and CBA study designs. They met through a series of teleconferences and at a face-to-face meeting. Modifications to the ROBINS-I tool were developed by expert consensus. Preliminary tools for each study design were piloted within the working groups. Feedback from piloting informed further modifications.
Results: Additional signalling questions were added to the confounding domain for both study designs. For ITS studies, questions related to the ability of observed trends pre-intervention to predict what would have occurred post-intervention in the absence of intervention. For CBA studies, questions related to the ability of the control group to mimic what would have occurred in the intervention group in the absence of the intervention. New signalling questions also address biases that may arise in designs where an intervention is cluster-allocated and where populations are cross-sectionally sampled at different time points.
Conclusions: These modifications to the ROBINS-I tool will allow its use to assess risk of bias in ITS and CBA studies.

19167

A catalogue of biases described in the literature, and their implications for ROBINS-I

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Background: Non-randomised studies provide evidence about adverse effects and long-term outcomes and are often included in systematic reviews about healthcare interventions. The ROBINS-I tool (Risk Of Bias In Non-randomised Studies of Interventions) facilitates an evaluation of risk of bias in these studies. The tool covers bias due to confounding, selection of participants into the study, classification of interventions, deviations from intended interventions, missing data, measurement of outcomes, and selection of the reported result. Although we believe that core bias domains are covered by the tool, ROBINS-I was developed primarily on epidemiological principles and expert opinion, rather than literature review.
Objectives: To collate the large number of biases described in the literature and determine whether the ROBINS-I tool comprehensively captures these biases.
Methods: We searched Medline, Embase, Web of Science, the University of Bristol library collection and Amazon books, for papers and textbooks that listed definitions of biases in epidemiological research. We included papers and textbooks that listed at least 10 biases. To organise the definitions of biases, we constructed directed acyclic graphs (DAGs) and grouped biases with a common causal structure. We drafted definitions for each unique type of bias. An expert panel approved all DAGs and definitions. For biases that are relevant to non-randomised studies of interventions, we considered whether each was covered by ROBINS-I.
Results: We included 22 papers and 17 textbooks, which described 239 biases. Ambiguous definitions made classification difficult; however, the constructed DAGs helped us differentiate most biases among the ROBINS-I domains. We found biases related to non-differential misclassification that were not explicitly covered by ROBINS-I.
Conclusions: Causal structures are helpful to understand biases. By adopting this framework for the interpretation of bias, we show that ROBINS-I covers most biases that may arise in non-randomised studies of interventions. However, further development of the tool should consider bias due to non-differential misclassification.

Long oral session 2: Reporting evidence synthesis

18261

Meta-ethnography reporting Guidance (eMERGe)

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Background: Evidence-based policy and practice require robust evidence syntheses which can further our understanding of people's experiences (e.g. regarding healthcare). Meta-ethnography is a 7-phase qualitative evidence synthesis method, developed by Noblit and Hare (1988). The approach, although devised in the field of education, is now used widely in other disciplines including health research. Meta-ethnography reporting – especially of the analytical processes and findings - has often been of poor quality, and this discourages trust in, and use of its findings. A bespoke meta-ethnography reporting guideline is needed to improve reporting quality.
Objectives: The eMERGe study followed a structured process to develop an evidence-based meta-ethnography reporting guideline in order to improve reporting quality
Methods: This study (http://emergeproject.org/) used a mixed-methods design in line with good practice in reporting guideline development. It comprised: (1) a methodological systematic review of guidance in the conduct and reporting of meta-ethnography; (2) a review and audit of published meta-ethnographies to identify good practice principles; (3) consensus studies to agree guideline content; and, (4) development of the guidance for dissemination.
Results: Results from the methodological systematic review and the audit of published meta-ethnographies revealed that more guidance was required around the reporting of all phases of meta-ethnography conduct, and

particularly phases 4-6 (relating studies, translating studies into one another and synthesising translations). Following the guidance-development process, the Meta-ethnography Reporting Guidance was produced, consisting of 21 items grouped into the 7 phases of meta-ethnography. The importance of considering context during each phase of meta-ethnography conduct was also highlighted.
Conclusions: The Meta-ethnography Reporting Guidance can help reviewers to report important aspects of meta-ethnography. It is hoped that use of the guidance will raise meta-ethnography reporting quality, and facilitate the use of meta-ethnography evidence to improve practice, policy and service use.

Attachments: GES Sept 2017-Meta-ethnography reporting Guidance (eMERGe) JN submitted .pdf

18331
Improving the conduct and reporting of narrative synthesis of quantitative data (ICONS-Quant): rationale and update of the ICONS-Quant project

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Background: In many reviews quantitative data are synthesised narratively: we estimate that narrative synthesis (NS) is used in 20% of Cochrane Reviews. A key criticism of NS is lack of transparency, and the risk of subjective assessments of evidence. This makes it difficult to assess rigour and potential bias in NS. Developments to improve synthesis methods have largely overlooked NS of quantitative data.
Objectives: 1) to establish current practice in reporting of NS of quantitative data; and, 2) to develop resources to improve the implementation of NS of quantitative data.
Methods: Using a random sample of systematic reviews from the McMaster HealthEvidence database, we assessed 75 public-health reviews that had used NS for their key outcome(s). Data were extracted on: reporting and justification of NS methods; management of heterogeneity; and, transparent links between the data and text.
Results: Description of NS methods and reference to NS guidance was absent in most reviews (95% n=71/75). Investigation and management of heterogeneity was typically unclear. In 41% (n=31) of reviews, limited presentation of tabulated data prevented transparency between the data and synthesis findings. Grouping of studies was used to manage heterogeneity but with no explanation, and heterogeneity in effects was rarely investigated. A 2-year programme, funded by the Cochrane Strategic Methods Fund (SMF), to develop resources to facilitate improved implementation of NS is now under way. The resources being developed include: consensus-based reporting guidelines; guidance for authors on implementation; and, online training.
Conclusions: These findings support the criticism that NS is characterised by a lack of transparency, raising concern about the potential for bias in a large volume of the SR evidence base. The near absence of description of NS methods in reviews suggests a lack of clarity among authors about NS as a method. The work under way aims to address this by providing clear guidance on reporting and implementation of NS. These resources will provide support for authors undertaking NS, as well as those assessing the adequacy of NS within Cochrane and beyond.

18572
Improving reporting quality of practice guidelines: RIGHT statement and its extension

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Background: The quality of reporting practice guidelines is often poor, and there is no widely accepted guidance or standards for such reporting in healthcare.
Objectives: To develop series reporting checklists and improve the reporting quality of practice guidelines.
Methods: The international RIGHT (Reporting Items for Practice Guidelines in HealThcare) Working Group was established and the EQUATOR (Enhancing the QUAlity and Transparency Of health Research) Network approach was used to develop reporting checklists.
Results: The working group has developed the RIGHT checklist which includes 22 items that are considered essential for good reporting of practice guidelines. There are 10 extensions under development, including RIGHT for proposals, RIGHT for conflicts of interest, RIGHT for systematic review/meta-analysis (how to report SR/MA in a guideline), RIGHT for recommendations (how to report recommendations in a guideline), RIGHT for Traditional Medicine, RIGHT for patients' values and preference, RIGHT for diagnosis guideline, RIGHT for equity, RIGHT for adaptation, and RIGHT for acupuncture.
Conclusions: Clear, explicit and transparent practice guidelines enable healthcare practitioners, health administrators, programme managers and the public to understand and implement recommendations that may positively affect patients and various populations. The RIGHT statement and its extensions will accelerate improvement of practice guidelines if developers endorse and comply with them.

19398
Reporting of information retrieval in Campbell Systematic Reviews

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Background: The Campbell Collaboration is embarking on a series of methods reviews, in which the intention is to examine the extent to which Campbell reviews comply with Campbell standards; identify and encourage good practice; and, to compare methods applied in Campbell reviews to non-Campbell reviews.
Objectives: The methods review in question concerns information retrieval for Campbell reviews, and constitutes analysing the reproducibility of searches from Campbell reviews, as well as mapping the resources and/or methods used to identify studies, i.e. databases, contacting authors, reviewing reference lists, backwards and forwards citation checks, snowballing, etc.
Methods: As reporting standards have presumably improved over the years, we propose to code and extract information-retrieval data from all full reviews from 2010 and onwards (88 reviews) on the following items: - Methods/sources used - Reproducibility of searches (e.g. exact search strategies, end/start date provided) - Information specialist involvement We will also consider screening other systematic reviews in similar fields. Furthermore, we would like to see if there has been an improvement in information-retrieval reporting standards since the introduction of specific reporting standards for Campbell (October, 2014). Using the methods applied by Koffel et al. (2016), we will be able to compare reporting of searches in Campbell reviews to those of systematic reviews in high-impact pediatrics, cardiology and surgery journals; potentially also to identify predictors for inclusion of reproducible search strategies, e.g. topic/group; information specialist involvement; or referral to a conduct or reporting standard.
Results: We plan to present the preliminiary results of our ongoing work. Koffel JB, Rethlefsen ML (2016). Reproducibility of Search Strategies Is Poor in Systematic Published in High-Impact Pediatrics, Cardiology and Surgery Journals: A Cross-Sectional Study PLoS ONE 11(9) 2016. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0163309

Long oral session 3: Guideline adaptation and updating

18585
Contextualisation of clinical practice guidelines: An innovative approach for the primary healthcare of chronic musculoskeletal pain in South Africa

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Background: Chronic musculoskeletal pain (CMSP) is a global healthcare concern. High-quality, evidence-based clinical practice guidelines (CPGs) can facilitate quality healthcare for CMSP. CPGs developed in developed nations may not be appropriate in resource-constrained settings, due to differences in socio-cultural and policy contexts. Contextualisation is an option to develop guidance for resource-constrained settings.
Objectives: To develop an evidence-based CPG for the primary healthcare of adults with CMSP in the Western Cape Province of South Africa, using a novel process of CPG contextualisation.
Methods: A four-part contextualisation model was developed. The four parts consisted of a contextual analysis, evidence synthesis, contextual integration and evaluation. Qualitative methodology was used to investigate context factors that influence the healthcare of patients with CMSP. A systematic review was conducted to identify current, high-quality CPGs on the topic, and a core set of recommendations were synthesised from the CPGs. A multidisciplinary panel of experts authenticated recommendations and contextualised them for the intended context, using consensus methodology. The CPG was externally reviewed, using a survey.
Results: A core set of 43 clinical recommendations were developed through the evidence synthesis and contextual-integration processes. The 20 patients and 21 clinicians who participated in the contextual analysis agreed on the context factors that influence care as: personal characteristics of the patient and clinician; social and environmental circumstances; healthcare interventions received; and, healthcare system factors. A diverse group of 18 potential end-users rated the recommendations as largely acceptable for the intended context.
Conclusions: CPG contextualisation was found to be a time and resource-efficient way to summarise evidence-based recommendations from high-quality, existing CPGs. The approach facilitated the integration of multiple stakeholder perspectives in CPG development. The end-result was a contextualised evidence-based, multimodal CPG for the primary healthcare of adults with CMSP in South Africa.

18722
UpGlossary: Guidance on terminology and definitions for updating clinical guidelines

Martínez García L[1], Pardo-Hernandez H[1], McFarlane E[2], Sanabria AJ[1], Sparrow K[2], Alonso-Coello P[1], the G-I-N Updating Guidelines Working Group OBO[3]

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Background: One of the challenges in updating clinical guidelines (CG) is the lack of standards in terminology (what do we call it?) and definitions (what does it mean?). This makes it difficult to efficiently identify methodological research, share experiences and identify research gaps.
Objectives: To reach a consensus for terms and definitions in the updating of CGs.
Methods: A Steering Committee was convened to design and co-ordinate this initiative. We invited a panel of experts from institutions developing CGs that belong to the Guidelines International Network (G-I-N) Updating Guidelines Working Group. The Steering Committee developed an initial list of terms and definitions through brainstorming and discussion, taking into account: 1) research evidence in the field; and, 2) the Steering Committee's experience. Panel members participated in three written rounds to discuss, refine and clarify the proposed terms and definitions. Finally, panel members will be surveyed to assess consensus regarding the glossary.
Results: Eighteen terms and definitions were proposed: 1) continuous updating; 2) decision to update; 3) editing process; 4) fixed updating; 5) full updating; 6) impact of the new evidence; 7) partial updating; 8) prioritisation process; 9) signal for an update; 10) surveillance process; 11) time of validity; 12) timeframe; 13) tools and

resources; 14) up to date; 15) update cycle; 16) update unit; 17) updated version; and, 18) updating strategy. Thirteen (13/23; 56.5%) members participated in the first consensus process in June 2016, and seventeen (17/34; 50.0%) members in the second round in December 2016. The last round was scheduled for March 2017 and the consensus survey in June 2017. We will present the UpGlossary at the GES.
Conclusions: Developing a glossary for CG updating is a milestone of the G-I-N Updating Guidelines Working Group. The continuous growth of knowledge in this area will provide the basis for future glossary updates.

18729

The UpPriority Tool: Development of a prioritisation tool for updating clinical guideline questions

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Background: Due to the continuous emergence of new evidence, clinical guidelines (CGs) require regular surveillance of evidence to maintain their trustworthiness. Updating CGs is resource-intensive and time-consuming; therefore, updating may include a prioritisation process in order to efficiently ensure CGs remain up to date.
Objectives: To develop a pragmatic tool to prioritise clinical questions for updating within a CG. The specific objectives include: 1) to identify and describe the most important items required to prioritise clinical questions for updating; 2) to establish a rating scale of items and provide guidance on how to rate them; and, 3) to establish criteria on how to calculate and present priority scores in order to support decision making for updating clinical questions within a CG.
Methods: The development of the UpPriority Tool will consist of a multi-step process including: 1) generation of an initial version of the tool; 2) optimisation of the tool (feasibility test of the tool, semi-structured interviews, Delphi consensus survey, external review by CG methodologists and users, and pilot test of the tool); and, 3) approval of the final version of the tool.
Results: The initial version of the UpPriority Tool included six items: 1) availability of new relevant evidence; 2) relevance of clinical question; 3) replicability of clinical question; 4) users' interest; 5) impact on access to healthcare (resource use and costs); and, 6) impact of outdated recommendations (safety). These items are assessed using a 7-point Likert scale. We also developed a score calculation and a summary report. We will present the results of the feasibility test, the semi-structured interviews, and the Delphi consensus survey at the GES.
Conclusions: The UpPriority Tool will be developed for assessing any clinical question within a CG and should be easy to use in CG institutions. The standardisation of prioritisation processes for CG updating using the UpPriority Tool will improve efficiency in CGs updating.

19063

A fast-track method of adapting clinical practice guidelines at King Saud University Medical City (KSUMC), Riyadh, Saudi Arabia

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Background: In order to realise the national and international standards of accreditation, the clinical practice guidelines (CPGs) Program at KSUMC was launched as a quality improvement collaborative project with Bahamdan Research Chair for Evidence-Based Health Care and Knowledge Translation in 2009.
Objectives: A fast-track method was needed to develop evidence-based CPGs at KSUMC

Methods: Following a guidelines-awareness week directed to all healthcare professionals (HCPs) in 2010, 20 multidisciplinary teams were developed. They were trained to set priorities, search, screen, assess, select and customise the best-available CPGs technically supported by the programme's steering committee. The ADAPTE framework was the main reference used with highlights on other G-I-N resources. Due to the limited number of systematic reviewers, a modified way of handling the recommendations was used. Moreover, new tools to support the adaptation process were designed. A strict peer-review process was used for content and methodology.
Results: In addition to raising awareness and building capacity, 29 CPGs were approved by February 2017 with 10 more in progress. A new tool relating to identifying priority topics was developed (Appendix 1) and 3 existing ADAPTE tools were modified (Appendices 2 - 4). The AGREE-II tool was used instead & specific implementation tools were suggested in certain CPGs. The 29 CPGs were integrated with other existing projects (e.g. EMRs, performance management system, residency training). Preliminary implementation data suggest positive impact on patient outcomes (e.g. LOS, prescribing of antibiotics, etc.). Leadership commitment was a strength but the high turnover of team members necessitated frequent training of HCPs.
Conclusions: The ADAPTE Framework has repeatedly proven to be the working prototype for CPG adaptation allowing for modifications in different contexts. This modified version represents a quick, practical, economic method with a sense of ownership by staff. It should be replicated in other countries to assess its validity. This could inform the update of the next ADAPTE resource toolkit and other regional CPG programmes.

Attachments: APPENDICES 1-4_222017.pdf

Long oral session 4: Priority setting for research

18280

How to prioritise review topics with stakeholders: A method for prioritising systematic review topics in health, education and social welfare

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Background: Although the need to produce relevant and top priority evidence for health is widely supported, a gold standard for conducting a priority setting exercise in health research, dissemination and implementation does not exist. We developed and tested a method that supports the priority setting of systematic review topics in health.
Objectives: Our priority setting framework aims (1) to be usable in a variety of priority setting exercises regarding health, education and social welfare topics and it aims (2) to enable stakeholders to contribute to the creation of review topics. We have undertaken a pilot in Switzerland and are currently rolling it out in Austria and Germany.
Methods: Our multi-stage framework features the use of online questionnaires as part of a modified Delphi technique that allows for an easy incorporation of both metrics- and consensus-based techniques. This reduces resource expenses and potential disadvantages of a face-to-face expert panel such as social pressure and dominance of certain individuals or groups. Secondly, the questionnaires are programmed in a free, open-source software tool that allows for easy replication by different review groups in different contexts. Thirdly, we use a recruitment strategy in which organisations are invited to nominate respondents from within their own organisation. This increases the likelihood that the invited individuals will participate and allows for selection of individuals who are considered most suitable for contributing to the priority setting exercise. Fourthly, as many stakeholders are not familiar enough with PICO questions, we step-wise guide the stakeholders to indirectly

create potential review topics in a PICO format. Discussion: Drawing on our experience from the pilot, our multi-stage process is very suitable for a quick and thorough prioritisation of systematic review topics with relevant stakeholders. It is user-friendly for both the research team and the participants. We would like to use the opportunity to share the results of this pilot project in order to discuss ways forward to a generalised framework for prioritising systematic review topics.

18878

A map of maps: evidence for the sustainable development goals

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Background: The last decade has seen an increase in production of impact evaluations and systematic reviews aimed at identifying effective development interventions. This growth presents a challenge – how to ensure existing evidence is accessible to decision makers, that new studies avoid duplication and that important evidence gaps are addressed? In response, researchers, governments and non-governmental organisations (NGOs) are increasingly investing in evidence-mapping exercises. To date, maps have catalogued evidence relating to many different types of international development programmes. Together they offer an important body of knowledge for addressing the sustainable development goals (SDGs).
Objectives: The map of maps will catalogue completed and ongoing systematic-evidence maps focusing on development programmes in low- and middle-income countries (L&MICs). In doing so we have three objectives: 1) to identify, critically appraise and summarise the characteristics of existing systematic-evidence maps; 2) to identify thematic gaps where new systematic-evidence maps could add value; and, 3) to provide easy access to existing systematic-evidence maps through an interactive platform. In so doing the map of maps is designed to provide a portal for key evidence on effectiveness to address the SDGs
Methods: The map will draw on systematic methods to identify relevant systematic-evidence maps. Key elements of the methodology will include a systematic search of the published and unpublished literature, and the application of systematic-inclusion criteria and data-extraction processes.
Results: The map will be completed by late April 2017 and a report and interactive online map will be published soon after. We expect the map of maps to catalogue over 50 evidence maps relating to various themes across international development. The interactive map will categorise evidence according to the different types of development programmes and the SDGs that they provide evidence on.

Attachments: Map of Maps protocol_WWGS.pdf

19039

Evidence and gap maps to inform child welfare research priorities in Victoria, Australia

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Background: In response to recommendations made by the Royal Commission into Family Violence, the Victorian Department for Health and Human Services (DHHS) has developed the 'Roadmap for Reform' (RfR), aiming to support children and families in need through targeted early interventions; and to improve outcomes for children in home-based and out-of-home care. An immediate action emerging out of the RfR is to deliver a Children and Families Research Strategy to identify key research priorities and direct funding to where it is needed most.
Objectives: DHHS has commissioned five evidence and gap maps (EGMs) to inform this action. The goals is to

identify and synthesise evidence on the effectiveness of different interventions aiming to prevent child maltreatment or reduce the adverse consequences of this maltreatment. Four gap maps focus on interventions targeting: (a) domestic violence; (b) high-risk adolescents with behavioural problems; (c) children with disabilities; and, (d) indigenous populations. A fifth map focuses on trauma-informed interventions.
Methods: EGMs provide a visual overview of the availability of evidence for a sector. EGMs consolidate what is known about 'what work's' by mapping out existing and ongoing systematic reviews and impact evaluations in a field; and by providing a graphical display of areas with strong, weak or non-existent evidence on the effect of interventions.
Results: By date of submission, 6300 titles and abstracts of systematic reviews and randomised-controlled trials have been screened. Full-text screening is in progress. The EGM will be finalised by May 2017 and present the extent of evidence across types of interventions – prevention; early intervention; and therapeutic interventions - and across outcome domains, including child and parent/caregiver-related wellbeing (e.g. safety, physical, emotional, social and cultural wellbeing, education and learning, structural wellbeing).
Conclusions: This project is an example of how EGMs can inform policy development and strategically support key stakeholders in their decision making around policy, programmes and practice within child and family services.

19336
Priority areas for systematic reviews in chronic otitis media – findings of a systematic-scoping process

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Background: In 2016, we started a project to produce a suite of Cochrane reviews for people with chronic otitis media (COM). COM is chronic inflammation of the middle ear with discharge through a tympanic membrane perforation. Incidence is higher among children and people in lower and middle-income countries, and from certain ethnic groups.
Objectives: To identify priority areas in COM for Cochrane reviews through a scoping process and stakeholder consultation.
Methods: There were four stages in the scoping process described in a companion paper. The first three stages found six possible review topics and key outcomes to be used across all reviews. In the final stage, stakeholders around the world were consulted on the proposed scope.
Results: The consultation confirmed the importance, and method of measurement, of outcomes. Patient input suggested complete resolution of ear discharge was more meaningful than reduction in discharge, with important psychological and lifestyle implications. This resolved our initial uncertainty about the most relevant outcome to measure improvement. Engagement with stakeholders confirmed the priority of six proposed reviews, but another priority review was also identified. This topic was based on variations in practice, which had a greater influence on prioritisation than availability of evidence. Cost and accessibility of treatment options were highlighted as important during the process due to the epidemiology of the disease. The prioritised reviews were: 1) topical antiseptics vs. topical antibiotics; 2) topical antibiotics, with steroids; 3) topical antibiotics (without steroids); 4) aural toileting; 5) systemic antibiotics; 6) systemic vs. topical antibiotics; and, 7) topical antiseptics.
Conclusions: The scoping process identified 7 prioritised reviews that can be completed within available resources. The exercise showed that globally, factors other than efficacy and availability of evidence are important. Although most stakeholders believed that topical antibiotics are the most effective treatment, the variations in practice, often driven by resource constraints, show the need to consider other treatments.

Long oral session 5: KT to promote EBDM

18255

Knowledge brokering: An organisational strategy to support evidence-informed public health

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Background: The National Collaborating Centre for Methods and Tools has implemented strategies for ten years to support capacity development for evidence-informed decision making amongst public health professionals in Canada. The knowledge broker mentoring programme is a comprehensive strategy that simultaneously develops capacity amongst the workforce, while supporting organisational change in culture to support staff as they develop their new skills.
Objectives: The National Collaborating Centre for Methods and Tools (NCCMT) has developed and successfully piloted a 16-month mentorship programme to provide public health professionals with the knowledge, skills and tools needed to act as knowledge brokers within their Health Department and advance the uptake and use of research evidence in public health practice.
Methods: Senior management at each unit participated in a 2.5-hour focus group that assessed the organisational culture in their health unit for evidence-informed decision making (EIDM) and identified targets for change to support EIDM. Front-line staff (5-6) from each health unit participated in a 16-month curriculum. The programme included in-person workshops at McMaster University; an initial 5-day session, a 3-day session at six months and finally 2-day session at twelve months. Staff also participated in monthly webinars and monthly phone and email support with a senior knowledge translation expert. Finally, a practice based issue was identified by each health unit and a rapid review conducted by the participants. Changes in performance on an EIDM Assessment were analysed using a paired t-test (non-parametric test, Wilcoxon Signed Ranks Test).
Results: Strategies to improve the support and use of EIDM at the organizational level were identified and implemented. A statistically significant increase in EIDM knowledge and skill was observed following the program ($p<0.017$); specifically, statistically significant improvements were observed regarding interpretation of quantitative findings from single studies ($p<0.001$) and meta-analy
Conclusions: Knowledge broker mentoring shows potential as an promising strategy supportive evidence use.

18371

Evidence-informed policy using knowledge translation tools: the case of preterm deliveries among Syrian refugees in Lebanon

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Background: Preterm deliveries are the highest contributor (26%) to under-1 mortality rates among Syrian refugee children in Lebanon. This places Lebanon in a critical state when it comes to achieving the third sustainable development goal. Yet current multidisciplinary health services do not ensure adequate care to prevent avoidable preterm deliveries among Syrian refugees.This has been aggravated by the lack of effective use of evidence in policymaking,which has a great toll on the health of the 1.5 million Syrian refugees in Lebanon.
Objectives: The aim of this study is to assess the effectiveness of the knowledge translation (KT) tools and platform (KTP) in influencing policy decisions on avoidable preterm deliveries among Syrian refugees in Lebanon.
Methods: This study used the following KT tools:1) policy brief development to address avoidable preterm deliveries in Lebanon; 2) 15 focused meetings with content experts, policymakers and stakeholders; 3) convening

a national policy dialogue; and, 4) evaluation of the policy brief and dialogue.
Results: Stakeholders were engaged to identify the key priorities to be tackled in relation to avoidable preterm deliveries.The feedback from the focused meetings fed into the development of the policy brief and ensured that the problem and options suggested are comprehensive and context specific.The policy brief was then sent to 22 policymakers and stakeholders including government officials, managers in non-governmental organisations,health professional associations,donor agencies and researchers.The policy dialogue supported the options proposed in the policy brief. Ensuring access to antenatal care and improving the quality of maternal health in primary healthcare centres were two of the most supported options.The dialogue evaluation showed that the policy brief informed the deliberations in the dialogue and the future decisions of policymakers and stakeholders.
Conclusions: KT tools are promising in informing decisions among policymakers and stakeholders, and in developing a research-policy interface. None the less, post-dialogue follow up is vital to ensure implementation of the decisions.

18898

WikiRecs and BMJ RapidRecs: rapid and trustworthy recommendations that provide ingredients and tools for shared decision making

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Background: It often takes years before practice-changing evidence published in randomised trials reaches patients in routine clinical practice. Contributing factors include the prolonged time it takes for guideline organisations to update their recommendations, and lack of supporting tools for shared decision making. In response, we have created WikiRECS, including the pre-eminent BMJ RapidRecs project.
Objectives: Faced with potentially practice-changing evidence, we aim to, within 90 days, create and disseminate trustworthy recommendations, evidence summaries and consultation decision aids addressing important topics in: 1) a novel, user-friendly, single-page synopsis format; and, 2) digitally structured multi-layered presentation formats on the MagicApp (www.magicapp.org).
Methods: We screen new evidence daily through a tailored system, developed in partnership with McMasterPLUS, that identifies the most relevant and newsworthy research. After a topic is chosen, we recruit a full guideline panel with no relevant financial and minimal intellectual interests. The panel, including patients, content experts, methodologists and frontline clinicians finalise the PICO question. A parallel team performs systematic reviews addressing relative effects, baseline risk, and values and preferences as necessary, within 45 days. The panel then considers the evidence and makes recommendations. GRADE and IOM standards provide a framework for each step in the process. The recommendation and evidence synopsis, and its supporting systematic reviews, is published in one or more journal(s).
Results: In the first 6 months, we have completed 3 BMJ RapidRecs, 2 WikiRecs, with several more planned or in preparation. All supporting evidence is accompanied by interactive infographics, GRADE summary of findings, and decision aids for the clinical encounter. Conclusion: Multidisciplinary teams can produce trustworthy recommendations, presented in understandable formats that are easily accessible by patients and clinicians, in a very short timeframe. This approach demonstrates potential synergies between evidence synthesis, appraisal and dissemination within the evidence ecosystem.

19172

Systematic approach to guide the Lancet Commission on Syria: The case of healthcare workers in conflict settings

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Background: The violent conflict in Syria has caused the largest humanitarian crisis of our time. To raise the profile of the Syrian crisis in global health and mobilise a stronger international response, The Lancet and the American University of Beirut (AUB) launched the 'Lancet Commission on Syria: Health in Conflict'. The Commission invited the Center for Systematic Reviews on Health Policy and Systems Research (SPARK) and the Knowledge to Policy (K2P) Center at AUB to support and contribute to its work. Method: We proposed a systematic approach to help guide the work of the Commission. The approach encompasses four steps: (a) selection of priorities; (b) scoping reviews; (c) evidence synthesis; and, (d) knowledge translation (KT). In this presentation, we will discuss the approach and reflect on the process, challenges and timelines.
Results: Step 1: a meeting with key stakeholders and experts was held in December 2016 to select priority themes pertaining to the Syrian crisis. One of the themes selected by the Commission for a policy paper was 'Healthcare workers in conflict settings'. Step 2: we conducted a rapid scoping review on this theme. We were able to supply the relevant literature to support the policy paper within 2 weeks. Step 3: our scoping review generated an evidence-gap map that was used to select the topic of violence against healthcare workers as the focus for a full systematic review for our team. Step 4: our team is discussing with the Commission the KT plan to promote uptake of findings into policies and actions. Conclusion: The proposed approach has proven to be feasible and acceptable so far, but not without challenges. If this experience is successful, other Lancet Commissions could use the approach to promote a systematic process that spans from priority-setting to evidence synthesis and KT to impact policy and action.

Long oral session 6: Guideline development

18500
Involvement of people with learning disabilities in guidance development – lost in translation?

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Background: Patient and public involvement is a core principle of many guideline programmes, and is cited as an indicator of quality. However, there can be challenges in how best to involve people who may have specific barriers to full and meaningful engagement. NICE is developing 2 guidelines that focus on care for people with learning disabilities (PLD). At GIN 2016, we provided early learning from supporting PLD; this updates our learning.
Objectives: We will describe the process of supporting the full involvement of PLD and give examples of resulting recommendations that reflect this input.
Methods: NICE have appointed PLD on the guideline committee and made adjustments to support full involvement. We describe those adjustments and how this supported PLD to fully contribute.
Results:A number of adjustments have been made to the standard NICE process. These are: • use of facilitators to review evidence with lay members prior to the meeting; • visual representation of evidence statements to inform group work; • translation of evidence statements into Easy Read; and, • accessible frameworks for decision making from consensus. The adjustments have presented challenges, but are welcomed as ensuring recommendations reflect the experience of those in receipt of care. And indeed, unintended benefits have been seen for other committee members. Ongoing review of adjustments has allowed us to identify learning and make changes. For example, the early translation of evidence statements into Easy Read led to statements that were too simplified and lost important details. However, all the committee members welcomed the consensus framework as a transparent approach to decision making.
Conclusions: To fully involve people with learning disabilities there is a need to make adjustments to usual

practice. The majority of adjustments can be cost neutral and easily incorporated. However, adjustments need to ensure that important aspects of the evidence are not lost in translation.

18791

WHO environmental and occupational health guidelines: 8 challenges

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Background: The World Health Organization (WHO) has set out a stringent procedure to ensure that guidelines contain evidence-based recommendations for healthcare interventions. WHO also expects exposure guidelines for various environmental risk factors to be evidence based. However, applying the same methods to exposure guidelines as for intervention guidelines poses many challenges.
Objectives: To list the challenges encountered in the development of WHO guidelines for environmental and occupational exposures.
Methods: Our experience with developing WHO guidelines on noise, air-pollution, nanomaterials and radiofrequency fields.
Results: We encountered the following challenges. For systematic reviews of health risks of exposures: 1. PICO questions for systematic reviews should be transformed, for example, into Participants, Exposures, Comparison exposures, Confounders and Study designs (PECCOS). 2. For environmental risks it is unrealistic to review the evidence for every possible health outcome. 3. There are no well-established methods for systematic reviews of health risks of exposures. In particular, the establishment of a dose-response curve is technically complicated. 4. There is only limited experience with systematic risk-of-bias assessment for environmental studies. 5. The assessment of the quality of the body of evidence as developed by GRADE is not applicable to exposure studies, and content experts feel that it unfairly downgrades the environmental evidence. For evidence-to-recommendation frameworks: 1. There are no established methods to determine an 'acceptable' exposure level below which the risks of adverse health effects would be acceptable. 2. There is no generally accepted definition for a guideline threshold level. 3. WHO environmental guidelines have so far not aimed to make recommendations on interventions but decision making is about the best intervention to solve a problem. Content experts see this as risk management which is outside their scientific remit and context specific.
Conclusions: Considerable challenges remain for WHO environmental health guideline development.

19207

Development and validity testing of the AGREE-HS, a health systems guidance quality-appraisal tool

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Background: Health systems guidance (HSG) documents contain systematically developed statements or recommendations intended to address a health-system challenge. Health-system challenges are most often associated with health-services delivery, governance structures and/or financial arrangements. While numerous tools exist related to clinical practice guidelines, no tools are available to guide the development, reporting and appraisal of HSG.
Objectives: The purpose of this study was to develop a tool to assist with the development, reporting and appraisal of HSG and to test the validity of the tool.
Methods: The draft AGREE-Health Systems (AGREE-HS) tool was developed based on a critical interpretive

synthesis of the literature and formal consultation with health-systems experts. To assess the face validity of the AGREE-HS, health-systems researchers, administrators and policy makers were invited to review it and provide feedback about its content and structure by completing an online survey. The survey included both Likert scale and open-ended questions.
Results: The draft AGREE-HS consists of 5 items that are individually scored on a 7-point response scale. Thirty individuals, representing all 6 WHO geographical regions, reviewed the AGREE-HS and completed the survey. Overall, respondents indicated that the AGREE-HS would be useful for guiding HSG quality appraisal (90%), HSG development (73.3%) and directing what to report in a HSG document (70%). Respondents agreed that they felt confident in applying the tool, based on the instructions provided (mean 5.7/7). Additionally, respondents agreed that the structure of the tool was logical and comprehensive. Key qualitative feedback suggested clarifying the interpretation of items and overall scores.
Conclusions: The results of this validity study support the use of the AGREE-HS in the development, reporting and appraisal of HSG. Survey results were used to further refine the tool. The refined tool is being applied in a follow-up study to appraise the quality of current HSG documents; this status report will serve as a baseline upon which to measure future improvement in the quality of HSG.

19258
Uptake and Implementation of GRADE among guideline developers in the United States

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Background: Clinical practice guidelines (CPG) provide a critical link in the implementation of best evidence in clinical practice. GRADE is a methodologically rigorous and transparent system for rating the confidence in the estimates of effect and moving from evidence to recommendations. It is being increasingly used by guideline developers across the globe including the United States (US).
Objectives: To assess the uptake of GRADE among guideline developers in the US and the extent to which suggested criteria for the use of GRADE system are implemented and reported.
Methods: We conducted a protocol-driven search for CPG by US-based guideline developing organizations listed in the National Guideline Clearinghouse published between 2005 and 2015. In order to attribute every CPG to one organisation, we excluded CPG that were developed jointly by more than one organization. Using a piloted data abstraction form applied independently and in duplicate we assessed the reported use of the suggested GRADE criteria for up to two CPG (the most recent) per organisation. We performed descriptive statistics using SPSS Vs. 24.
Results: Of 315 guideline documents, 135 by 33 organisations met inclusion criteria. We formally assessed 49 CPG. A majority of documents (87.8%) defined the certainty in the evidence consistent with GRADE. Only less than a third of CPG (32.7%) addressed all 5 domains for downgrading RCT evidence and few (6.1%) addressed all 3 domains for downgrading evidence from observational studies. All but one document (98.0%) used 3 or 4 categories for the overall certainty of evidence. Less than half (44.9%) provided a full evidence profile summarising the body of evidence. Approximately half of CPG (51.0%) addressed all 5 GRADE criteria for determining the direction and strength of recommendations. About 4 out of 5 (81.6%) of documents defined the strength of recommendations as strong and weak/conditional consistent with GRADE.
Conclusions: 1 in 3 evidence-based CPG originating in the US is developed using GRADE. Reporting of suggested criteria for the use of GRADE though is inconsistent with much room for improvement.

Long oral session 7: Priority setting for evidence implementation

1

Setting priorities for primary research: disaggregating systematic review data to inform the Healthy Lives Trajectories Initiative (HeLTI)

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Background: The Healthy Life Trajectories Initiative (HeLTI) will establish intervention research cohorts in Canada, China, India and South Africa to inform global policy and practice regarding interventions to reduce childhood obesity rates. We developed a method to prioritise the choice of interventions to be delivered specifically during pregnancy.
Objectives: To describe a systematic priority-setting method to identify pregnancy-related interventions for research cohorts.
Methods: Following identification of relevant systematic reviews (SR), two reviewers, independently and in duplicate, extracted data on publication year and included studies. A matrix of all included studies from the SRs identified the extent of overlap between SRs. Where more than two-thirds of studies overlapped, the most recent, high-quality SR, as evaluated using ROBIS, was selected for inclusion. For each pre-specified outcome, we developed a GRADE-based effectiveness matrix incorporating effect size and study quality to rank interventions as: 1) beneficial or harmful; 2) possibly beneficial or possibly harmful; 3) no effect; 4) possibly no effect; or, 5) uncertain effect. For interventions ranked as 1) or 2), additional data regarding study setting, participants, intervention composition, dosing, frequency, duration, feasibility, implementation co-factors and cost were extracted. We engaged with HeLTI stakeholders to examine common findings and potential reasons for differential effects by setting.
Results: The included studies' matrix identified 12 SRs in which there was more than two-thirds overlap, leaving 13 recent, comprehensive, high-quality SRs, for disaggregation. The effectiveness matrix identified four beneficial interventions, one harmful intervention and one possibly beneficial intervention.
Conclusions: Aggregated information from SRs, and specifically meta-analyses, often collapse or do not report details that are important for understanding variations in the effectiveness of interventions by settings. Our methods provide a systematic, practical approach to disaggregating SR information for selection of interventions for primary research or implementation.

2
Making the case for investing in public health: Return on investment

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Background: The economic consequences of premature death and preventable illness are considerable. The National Institute for Health and Care Excellence (NICE) in England has developed return on investment (ROI) tools to enable the determination of the cost impact and ROI of public-health interventions and therefore to maximise the health benefits of local services relative to the resources available.
Objectives: To make the economic case for investing in local stop-smoking services.
Methods: NICE's tobacco ROI tool was used to estimate the number of additional quitters that the local stop-smoking services can produce compared with no such services and the ROI. The data on current use of services covers 1 April 2013 to 31 March 2014 and reported that of the 8 456 877 smokers in England in 2013 – 14 583 525 (6·9%) used local stop-smoking services. The impact was assessed using a lifetime and 2-year time horizon and 3.5% discount rate and taking a healthcare and productivity perspective.
Results: Stop-smoking services led to an additional 89 852 quitters in 2013-2014 (11 per 1000 smokers) at a cost of

£109 million. In the first 2 years, these services saved a total of £56,327,113. This is the potential (gross) saving and does not include the cost of implementing the services. The potential savings included 230 617 fewer lost days, 185 561 fewer GP consultations, 53 126 fewer practice nurse consultations, 33 302 fewer outpatient visits, 6599 fewer hospital admissions and 102 436 fewer prescriptions. Over a lifetime, this investment will result in a gain of 6.8 QALYs per 1000 smokers (57 619 QALYs across England). For every £1 invested, £2.37 will be saved on treating smoking-related diseases and reduced productivity, and £12.87 will be saved overall if QALY gains are valued at £20 000 per QALY.
Conclusions: Recent estimates put the total cost of smoking to society in England at approximately £13.9 billion per year. The ROI tool demonstrates that investment in local stop-smoking services in England will lead to improved health and reduced healthcare expenditure as well as improved productivity to society.

3
Blood-donor eligibility in Belgian Red Cross' Blood Service: from systematic reviews to impact on policy level

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Background: The Belgian Red Cross Blood Service wants to support its blood donor eligibility criteria with solid evidence from systematic reviews (SRs), to guarantee donor and recipient safety, and a sufficient blood supply. However, current blood donor eligibility criteria are often determined at a legal level, and it is a challenge to use SRs to influence policy.
Objectives: To provide an overview of SRs conducted by the Belgian Red Cross' Centre for Evidence-Based Practice to support blood donor eligibility criteria; and, to provide information on a success story where a SR resulted in an amendment, to be implemented in our Blood Service in the near future.
Methods: (1) SRs were developed according to the Cochrane method and published in peer-reviewed journals. An overview will be provided on the conclusions of the SRs and their implications for our blood donor selection criteria; and, (2) an example will be given of the steps taken going from a SR (published in 2012) to an amendment of the law (in 2016) for a particular group of potential blood donors.
Results: A total of 79 studies was identified in 6 different SRs. SRs supporting blood donor's safety included: blood donors with hypotension (n=10 studies), (former) epilepsy patients as blood donors (n=3), and blood donation by sportsmen (n=18). SRs aimed at the recipients' safety included: hemochromatosis (n=6), men who have sex with men (n=14), and endoscopy (n=28) as risk factors for blood donation. The majority of the studies were observational. In the SR on hemochromatosis (hereditary iron overload) no evidence was found showing that patients undergoing regular bloodletting would present a risk for the blood supply, when compared with healthy donors. Our systematic review was used to inform the Belgian Senate on a proposed amendment, allowing stable hemochromatosis patients to donate blood. In January 2016 the amendment was finally approved. As a next step implementation decrees need to be formulated and implementation at our Blood Service will be started.
Conclusions: SRs can inform governments to develop evidence-based policies ensuring donor and recipient safety and a qualitative blood supply.

Long oral session 8: Methods for overviews

18142
How do characteristics, reporting methods and preparation times differ between systematic reviews with and without a published protocol?

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Background: Preparing a protocol before publishing a systematic review (SR) can minimise the potential for bias, increase transparency and reduce duplication. Despite the advocated importance and the potential advantages of protocols for SRs, there is currently no analysis that compares SRs with a protocol to SRs without a protocol.
Objectives: To explore trends in published protocols of SRs and to analyse how SRs with a published protocol differ from those without a published protocol.
Methods: We searched PubMed to 31 December 2016 to identify protocols of SRs. For all protocols published in 2012 and 2013, the respective SR was searched. For each of these SRs we matched a SR without a published protocol controlling for publication year and journal.
Results: The number of published protocols increased from 42 in 2012 to 404 in 2016. One hundred and twenty five (125) protocols were published in 2012 and 2013. About one third of SRs are still not published after 3-5 years. We included 80 SRs and 80 control SRs in our analysis. SRs with a published protocol are more transparently reported than their controls and are completed with more effort (e.g. higher number of databases searched and more languages considered). Moreover, risk of bias was assessed more frequently in SRs with a published protocol than in controls (86.3% vs. 60.0%; p=0.0002). However, the median time from search to submission was much longer for SRs with a published protocol (325 vs. 122 days; p=0.0009) and more than half of the SRs with a published protocol had performed the final search before submitting the protocol for publication. Almost two thirds of the SRs with a published protocol and about 10% of those without are registered in PROSPERO. Of these, only 22.2% have the updated status 'published'.
Conclusions: Quality, transparency and currency are cornerstones of SRs. However, none of them should be achieved at the expense of the others. The large number of unpublished SRs after 3-5 years is alarming. Updating the status of a SR in PROSPERO should be used more often. Based on our results, we suggest critically discussing the current practice of publishing protocols of SRs.

18737
Risk of bias versus quality assessment in systematic reviews: a comparison between ROBIS and AMSTAR

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Background: Systematic reviews (SRs) are widely used to support the development of clinical guidelines and other documents driving decisions in healthcare. Suboptimal SRs can be harmful and a reliable assessment of their validity is essential. A widely used tool is the AMSTAR checklist, while the ROBIS tool was recently launched to specifically assess risk of bias of SRs.
Objectives: To evaluate the inter-rater reliability (IRR) of AMSTAR and ROBIS for individual domains and overall judgment, the concurrent validity, and the time required to apply the tools.
Methods: Five raters with different levels of expertise assessed 31 SRs on pharmacological thromboprophylaxis

using AMSTAR and ROBIS. For each question, domain and overall risk of bias, we calculated the Fliess' k for multiple IRR (for AMSTAR, low risk of bias: eight yes-answers or more, high risk of bias: three yes-answers or less). We assessed the concurrent validity of the two tools by comparing different domains addressing similar items (Table). We recorded the time to complete each tool as mean time spent by each reviewer on each review. We classified agreement as: poor (≤0.00), slight (0.01-0.20), fair (0.21-0.40), moderate (0.41-0.60), substantial (0.61-0.80), almost perfect (0.81-1.00).
Results: The kappa for the agreement on individual domains ranged from 0.28 to 1 for AMSTAR and from 0.49 to 0.61 for ROBIS; kappa for overall risk of bias was 0.65 for both tools (Figure). We found a fair correlation between AMSTAR and ROBIS in the overall judgment (ρ=0.38), mainly because of discordances in the classification of SRs at intermediate risk of bias. The mean time to complete ROBIS was about twice that of AMSTAR (mean±standard deviation: 12.6±4.6 vs. 5.8±31.9; mean difference: 6.7±3.2). Concurrent validity on single domains will be presented.
Conclusions: We found a similar substantial IRR for both tools in the judgment of overall risk of bias. ROBIS requires more time to complete. Reasons for low correlation between AMSTAR and ROBIS may be differences in judgments or genuine differences in what the tools aimed to measure (methodological quality vs. risk of bias and appropriateness).

Attachments: AMSTAR vs ROBIS_figure.pdf, AMSTAR vs ROBIS_table.pdf

19059

Novel approaches to conducting overviews of reviews: Lessons from four overviews of health systems interventions

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Background: Overviews of the findings of systematic reviews of health systems interventions can help policy makers and other stakeholders to identify strategies for strengthening health systems. Methods for conducting such overviews are still evolving.
Objectives: 1) To examine the strengths and weaknesses of the methods used for four overviews of reviews of health systems reviews relevant to low income countries; and. 2) To discuss the methodological lessons from undertaking these overviews.
Methods: The overview methods were as follows: we searched PDQ Evidence – a database of evidence for health systems decisions – for relevant reviews and included well-conducted reviews published between 2005 and 2016 of studies that assessed the effects of governance, financial and delivery arrangements and implementation strategies. We excluded reviews that had limitations that were important enough that the findings of the review were not reliable. Two overview authors independently screened reviews, extracted data and assessed the certainty of evidence using GRADE. We prepared SUPPORT Summaries for eligible reviews, including key messages, summary of findings tables and assessments of relevance of findings to low income countries. We then reflected on the strengths and weaknesses of the methods used and identified lessons learned.
Results: The strengths of our methods included: 1) a 'layered' approach to evidence presentation; 2) multiple

checks through the review process for the reliability and applicability of reviews; and, 3) use of a well-tested format (SUPPORT summaries) for presenting review findings. Key limitations: 1) the process was very time and resource-intensive; and, 2) the preparation of summaries is a highly specialised task. Challenges included multiple, overlapping reviews on many topics; few data on resource use, adverse effects and equity impacts in reviews; and the wider challenge of summarising and presenting complex information on health systems.
Conclusions: Producing overviews would be facilitated by the wider use of summaries of findings tables and user-friendly formats in reviews of health systems interventions.

Long oral session 9: Real world evidence

18392

Harmonising routinely collected HIV-cascade-related data to strengthen monitoring and evaluation and support service management

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Background: There is currently a need to strengthen health information systems so as to improve health services and health outcomes. This is especially important for HIV management in South Africa where attrition is high both pre- and post-ART initiation. Due to the scale-up of ART, care givers are currently unable to easily and timeously track HIV-positive individuals as they move through the HIV (treatment and care) cascade. Routine data related to the HIV cascade is captured in multiple disparate clinical, laboratory, pharmacy and mortality databases. Harmonising these databases is a necessary intervention for tracking, linking and retaining HIV-positive individuals in services. However, there is currently limited evidence on opportunities, procedures and capacities for, and outcomes of efforts to harmonise routine electronic HIV-cascade-related databases into health-information management tools.
Objectives: The objective was to examine the processes, promises and challenges of electronically harmonising HIV-cascade-related databases so as to strengthen monitoring and evaluation, and support service improvements in terms of the performance of the HIV cascade.
Methods: We qualitatively evaluated the processes, promises and challenges of electronically harmonising HIV-cascade-related databases through the design and execution of a retrospective cohort study of adult men and women who entered the HIV cascade in a health sub-district of the Western Cape Province and were enrolled between 2012 and 2013.
Results: We learnt, by using the retrospective cohort study as a data-harmonisation exercise, that several ethical, technical and organisational factors play a role in accessing and harmonising multiple disparate city (local government) and provincial HIV-cascade-related databases, particularly for research purposes.
Conclusions: These findings of the qualitative evaluation of the retrospective cohort study are useful for the development of a real-world health-information management intervention, that can provide the informational support needed by care givers to track, link and retain HIV-positive individuals in services.

19140

Big vs. Small data: Opportunities in new data sources for evidence generation

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Background: The digital revolution has set in motion the ‘big bang’ of data generated by human digital

interactions and information storage. Data-analytic tools and sources of large datasets present great opportunity as well as risk to evidence generation. The presentation will present the status of big and small data analytics, and the potential uses to improve and innovate evidence generation. Context: Big data are data generated at high volume, velocity and variety. It is estimated that 1.7 billion bytes of data per minute are generated digitally. Big data use in evidence generation is about turning imperfect, complex, often unstructured data into actionable information. This actionable information requires using computational techniques to unveil trends and patterns within and between extremely large and complex development and other dataset sources. The characteristics of big data are that it is digitally generated, passively produced, automatically collected, geographically or temporally trackable, and continuously analysed. This has been used, particularly in the private sector through geo-sensing, community radio, postal data, drone data, social media and service data. However, access to this form of secondary data poses a challenge. In South Africa, organisations such as Code4SA and Open Data Durban have begun to drive access to public datasets. At this nascent stage of big data analytics, harnessing its use requires development professionals to be more aware of its potential, its sources, and uses. In addition, applying big data analytic approaches for small data use could improve how data are translated. Approach: The paper will further present cases of big and small data use in development, current open-source and advanced platforms to source and analyse data, and the rhetoric on privacy and policy on big data use.

19301

Allowing for both relevance and rigour in evidence synthesis – a bivariate power prior approach

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Background: The Health Technology Assessment (HTA) evidential landscape is changing - randomised-controlled trials (RCTs) are involving fewer patients, with shorter follow-up, and often use intermediate or surrogate endpoints. At the same time Real World Evidence (RWE) studies, e.g. observational studies or patient registries, are increasing in both number and scale. These changes are presenting decision makers with a considerable challenge. Whilst RCTs may be considered less biased, and RWE studies potentially more biased (due to treatment-selection effects and confounding), RCTs are not always considered as relevant for real-world decision making because of patient selection.
Objectives: Can we simultaneously address both relevance (to a target population) and rigour (risk of bias) of the available evidence in order to aid health decision making for a target population?
Methods: Using a bivariate power prior approach, to simultaneously down-weight potentially biased studies and up-weight more relevant studies (based on study-level covariates), the evidence from both RCTs and RWE studies for a variety of treatments for patients with multiple sclerosis (MS) is synthesised using a network meta-analysis (NMA) approach.
Results: Adding additional evidence from RWE studies, although increasing the overall evidence base, increased uncertainty surrounding specific treatment-effect estimates in this MS case study as between-study heterogeneity was also increased. However, predicting the treatment-effect estimates for a specific target population ameliorated this increase in uncertainty.
Conclusions: This case study illustrates that a bivariate power prior approach to evidence synthesis can simultaneously address both relevance and rigour, and enables more appropriate tailored treatment-effect estimates to be obtained.

19340

'Real-real world evidence' to understand the use of health information systems for decision making

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Background: Real-world evidence (RWE) can be defined as information obtained from heterogeneous sources outside clinical or academic research settings, and as a complement to data from experimental studies. We explored how RWE is produced, transformed, and, finally, used to inform decision making at different levels of the healthcare system.
Objectives: Our aim was to collect and employ RWE to develop and refine a framework mapping the suite of decision-making processes in delivery of primary healthcare, and how data and tools from Health Information Systems (HIS) are used to inform these decisions.
Methods: In the context of a research project focused on improving HIS in three African countries, we carried out a systematic review on the effects of interventions to improve HIS. After synthesising data from experimental studies, we hypothesised that the evidence synthesis should be complemented by local evidence. We therefore stepped into the 'real world' to gain insight on the utilisation of HIS for decision making in the daily practice of frontline health workers, district managers, policy makers and other stakeholders by using interviews and direct observation techniques. Armed with this RWE, we constructed a health information-based decision framework. We then re-defined this framework with RWE from observational and qualitative studies obtained via our initial literature search in a framework synthesis.
Results: Information obtained from stakeholders and observations revealed that the current HIS is largely donor driven, and thus focused on meeting downstream data collection, rather than the data needs of healthcare workers for decisions in their daily practice. These findings forced us to adapt our theoretical framework twice, leading to the definition of essential 'functions' of the HIS for clinical, managerial and public health decision making (see Figure).
Conclusions: Collecting and employing 'real-real world evidence' (RRWE) supports researchers in maximising the relevance of global evidence syntheses to real-world situations and needs. RRWE should be routinely considered, especially in syntheses involving complex health systems.

Attachments: Health-information-decision-framework.png

Long oral session 10: Meta-analysis methods A

A new instrument to assess the credibility of effect modifiers

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Background: Debates regarding the credibility of effect modifiers are often contentious. Although it is desirable to identify effect modifiers that explain heterogeneity of treatment effects, subgroup analyses may lead to spurious inferences of subgroup effects in randomised trials and meta-analysis. Authorities have, in response, suggested varying criteria to assess the credibility of effect modifiers. A formal, consensus-based instrument remains unavailable.
Objectives: To develop an instrument to assess the credibility of putative effect modifiers in randomised trials and meta-analyses.
Methods: We will follow a rigorous instrument-development process, which will involve expert panels and users. First, we will perform a qualitative systematic survey of the methodological literature discussing credibility of effect modifiers. We systematically searched MEDLINE, EMBASE and Textbooks and identified 409 potentially

relevant full texts. These reports will serve as the basis for identifying experts in subgroup analysis and generating candidate items for the new instrument. We are currently abstracting reported credibility criteria (e.g. pre-specification, test of interaction, small number of subgroup analyses), rationales, and context (e.g. in trials or meta-analyses, purpose of subgroup analysis) using both original quotes and a newly developed taxonomy. We will randomly choose 20 experts who will form two panels. Panel 1 will be involved in the instrument development and panel 2 in the testing phase. In addition, we will involve two groups of 20 users who will apply the draft instrument to a sample of subgroup analyses using formal user testing methods. We will test the final instrument in a reliability study. Discussion: At summit, we will present the concept, the item selection process, and the draft instrument. The new instrument will have immediate impact on the analysis, interpretation, and reporting of effect modifiers in individual trials and meta-analyses.

18053

A framework for meta-analysis of prediction models for binary and time-to-event outcomes

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Background: It is widely recommended that any developed - diagnostic or prognostic - prediction model should be externally validated across different settings and populations. When multiple validations have been performed, a systematic review followed by a formal meta analysis may help to understand whether and under what circumstances the model performs accurately or requires further improvements.
Objectives: To discuss methods for summarising the performance of prediction models with both binary and time-to-event outcomes.
Methods: We present statistical methods for dealing with incomplete reporting (of performance and precision estimates), and to obtain time-specific summary estimates of the c-statistic, the calibration-in-the-large and the calibration slope. In addition, we provide guidance on the implementation of a Bayesian estimation framework, and discuss several empirically based prior distributions. All methods are illustrated in two example reviews where we evaluate the predictive performance of EuroSCORE II and Framingham Wilson.

18133

Systematic review and meta-analysis of prevalence and single group continuous data: methodological and practical challenges and benefits

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Background: Systematic reviews and meta-analyses of evidence from studies other than RCTs are becoming more prevalent. In particular, meta-analysis of prevalence and single-group continuous data is an important new application of evidence synthesis for decision making. While there are published methodology papers that provide guidance on the appropriate strategies for performing these newer reviews, no study has yet explored the utility of these evidence-synthesis methods and the resulting methodological and practical challenges and benefits using real-world cases.
Objectives: This project examines the methodological and practical challenges and benefits of the synthesis of prevalence and single-group continuous data, using four real-world systematic reviews as cases.
Methods: Two pairs of systematic reviews were conducted on prevalence and on single-group continuous

outcomes. Comprehensive multi-step searches were undertaken for published and unpublished studies. Only English language studies were included. Retrieved papers were assessed for methodological quality using standardised critical-appraisal instruments from the Joanna Briggs Institute. Separate meta-analyses of prevalence and single-group continuous outcomes were performed for each review.
Results: Seventeen studies were included in the meta-analyses for the two prevalence reviews, while fifteen studies were included in the meta-analyses for the two single-group continuous data reviews. The key methodological issues were the definition of the null value and the utility of statistical significance. The central practical challenge was the conceptualisation of generalisability for these types of synthesised evidence. The key benefit was the ability to explore geographic and other types of population heterogeneity using subgroup analysis.
Conclusions: The systematic review and meta-analysis of prevalence and single-group continuous outcomes present different methodological and practical challenges and benefits that must inform the careful application of this type of synthesised evidence to clinical decision making. Additional research is needed to advance and further validate these methods.

19220

Adjusting trial results for biases in meta-analysis: combining empirical evidence on bias with detailed trial assessment

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Background: Randomised trials vary in methodological quality, and flaws in trial conduct can lead to biased estimation of the intervention effect. Recently, two methods for adjustment of within-trial biases in meta-analysis have been proposed. The first uses empirical evidence on the magnitude of biases observed in a large collection of meta-analyses; the second uses expert opinion informed by detailed assessment of the potential biases affecting each trial.
Objectives: Our aim is to integrate two existing approaches to bias adjustment in order to gain the advantages of both.
Methods: Three different methods for combining empirical evidence on bias and detailed study assessment were considered. Empirical bias distributions for trials with different combinations of risk-of-bias judgements were derived from a hierarchical model fitted to 64 meta-analyses from Cochrane reviews. Opinion-based bias distributions were averaged across four experts who read summary information on each trial in a new meta-analysis, and independently gave their opinions on bias. In the first combined method, empirical evidence and opinion were formally combined in a Bayesian analysis. In two alternative methods, experts were asked to give their opinion based on summary trial information and the empirical bias distribution, either numerically or by selecting areas of the distribution. The methods were compared through application to example meta-analyses.
Results: Numerical results obtained from the three different integrated approaches to bias adjustment were similar. In an example meta-analysis, bias adjustment based on empirical evidence and opinion caused the intervention log odds ratio to shift towards the null by 21%, and between-trial variance reduced substantially by 28%.
Conclusions: Adjustment for biases is useful in meta-analyses synthesising all available evidence. We recommend an integrated approach to bias adjustment, informed by both available empirical evidence and elicited opinion. We discuss the advantages and disadvantages of different approaches to combining evidence on bias with opinion.

Long oral session 11: Qualitative and mixed methods for evidence synthesis

18225

Ecological validity and usability of a critical-appraisal tool for qualitative, quantitative and mixed-methods studies: researchers' views and experiences

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Background: Systematic mixed-studies reviews are reviews combining qualitative, quantitative and mixed-methods studies. They are increasingly popular due to their potential for addressing complex interventions and phenomena. Because of the heterogeneous nature of study designs, one major challenge encountered with this type of review is the appraisal of the quality of individual studies. A critical-appraisal tool was developed for use in systematic mixed-studies reviews: the Mixed Methods Appraisal Tool (MMAT). The MMAT includes 19 items for appraising the methodological quality of five types of study: (a) qualitative studies, (b) randomised-controlled trials, (c) non-randomised studies, (d) quantitative descriptive studies, and (e) mixed-methods studies. Objective: This study aimed to explore the ecological validity and usability of the MMAT by seeking the views and experiences of researchers who have used this tool for the appraisal of studies.
Methods: We conducted a qualitative descriptive study using semi-structured interviews with MMAT users. A purposeful sample was drawn from two main sources: a list of people who had contacted the developer of the MMAT, and a list of people who published a review in which they had used the MMAT. All interviews were transcribed and analysed by two coders using inductive thematic analysis.
Results: A total of 20 participants from 8 countries were interviewed. They were PhD students, postdoctoral fellows, professors, lecturers, research associates and librarians. Twenty-five main themes were identified and grouped into 3 broad categories: strengths of the MMAT, difficulties encountered when using the MMAT, and changes made or suggested in the MMAT. The comparison of these themes led to the identification of 6 main divergent views.
Conclusions: Based on the results of this study, several recommendations for improving the MMAT were put forward. This will contribute to greater validity and usability of the MMAT. The validated tool will facilitate the appraisal process in systematic mixed-studies reviews.

18499

The use of a Theory of Change model in a mixed-methods systematic review (MMSR): an example from the Development Aid sector.

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Background: A Theory of Change (ToC) is a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. The use of a ToC, and collecting data on outcomes along the causal chain, can be helpful in attempts to explain effect-size heterogeneity and to better understand differences in findings by context, when developing a systematic review.
Objectives: To describe the added value of a ToC throughout the conduct of a MMSR about the effectiveness (quantitative arm MMSR) and implementation (qualitative arm MMSR) of sanitation and handwashing promotion programmes on behaviour change.
Methods: The development of the initial ToC was based on relevant systematic reviews, existing WASH

behavioural models and frameworks on contextual/implementation factors. The ToC was further adapted by stakeholder input (4 development practitioners/1 donor/1 topic expert/2 qualitative research experts). Based on the evidence gathered from the MMSR and more extensive stakeholder involvement (13 development practitioners/consultants/3 policy makers/2 topic experts/2 qualitative research experts/4 donors), final adaptations to the ToC were made (Figure 1).
Results: The ToC helped us in different steps of the MMSR process. Firstly, the ToC was used to fine-tune the selection criteria of our MMSR (e.g. distinction between primary and secondary outcomes). Secondly, it was used as the a-priori model in the 'Best fit framework synthesis' (qualitative evidence synthesis methodology) which synthesised the qualitative research data on implementation factors of sanitation and handwashing programmes. Thirdly, the iterative process of ToC development created a sense of ownership and stakeholder buy-in and clarified the research focus of the MMSR. Finally, we projected the final conclusions of our MMSR on the ToC.
Conclusions: An evidence-based ToC guides researchers before, during and after the conduct of an MMSR and it will help policy makers to understand the important role of implementation, and the processes determining behaviour change in handwashing and sanitation.

Attachments: Figure 1.tif

18684
Emerging methodologies: the use of text and opinion in systematic reviews

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Background: The design of complex policy interventions to inform both management and clinical decision making requires due consideration of the 'best-available' evidence. Where appropriate and feasible, this should relate to evidence derived from high-quality quantitative or qualitative research. However, there remain many aspects of clinical care that either have not or cannot be fully explored by such evidence alone. The truth is that policy makers are frequently required to make their best assessment in the absence of definitive evidence and many areas of clinical care continue to be supported by clinicians' tacit knowledge derived from their clinical experiences or the dominant healthcare discourse at the time of practice. Of critical importance in these instances, systematic review of text and opinion may serve as the best-available evidence. The value of cumulative, critically appraised evidence of this nature should not be underestimated.
Objectives: To highlight the important role that the richness of evidence derived from text and opinion synthesis may contribute within various healthcare settings, especially when there is an absence of research designs.
Methods: A methodology working group comprising experts from across the Joanna Briggs Collaboration has established and continues to review guidance and processes for this emerging methodology.
Results: The Joanna Briggs Institute has developed guidance and software to assist reviewers to appraise, extract and analyse data from textual and expert opinion-based evidence. Further ongoing work and challenges will be presented, including identifying the source of the opinion, considering the issue of credibility, and extracting conclusions from textual data.
Conclusions: Translating research evidence into policy and practice remains the ultimate goal. However, efforts also need to be cognisant of context and the pressures and urgency associated with the development of meaningful policies to inform decision making. As such, reviews that consider text and opinion may offer a credible approach to dealing with uncertainty in a real and systematic way.

18709

Integrating findings from a qualitative evidence synthesis with related reviews of effectiveness: A matrix-table approach

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Background: Using qualitative-evidence synthesis (QES) findings to supplement findings from review of the effectiveness of interventions is a relatively new approach, and the most appropriate methods for doing this are still unclear.
Objectives: To use a matrix table to integrate the findings from a QES on vaccination communication with those from related Cochrane reviews on the effectiveness of vaccination-communication interventions.
Methods: To create the matrix we did the following: • We went through each of the QES findings and identified features of communication interventions that parents perceived as facilitators, including features tied to information timing, availability, amount, source and content. • We organised these features into groups and created 8 questions reflecting key issues. These questions, which can be answered as yes, no or unclear, allowed us to assess the alignment between the issues identified in the QES and the interventions assessed in the effectiveness reviews.This alignment was expressed in a matrix table (Table 1). • We assessed whether there was a full or partial match between each of the questions and the intervention components from each trial and added these to the table.
Results: Most of the matrix-table questions were not addressed by the effectiveness trials (Table 1). Poor reporting in the trials made this assessment difficult.
Conclusions: Using a matrix-table analysis to compare the QES findings to the interventions used in the studies in the related effectiveness reviews allowed us to identify gaps in the trial interventions in relation to the issues that parents see as important. QES can play a unique part in complementing reviews of effectiveness by synthesising evidence that helps to unpack and explain effectiveness findings, and by contributing to identifying further research questions.

Attachments: Matrix Table 1.pdf

Long oral session 12: Improving implementability of evidence

18696
Evidence of uncertainty: an assessment of how many Cochrane Clinical Answers provide a clear confident Answer to the question posed

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Background: To assist their users in making informed decisions about what treatments to use, BMJ Clinical Evidence devised a categorisation system, which aimed to identify treatments that work (benefits outweigh the harms) and highlight treatments that do not work (harms outweigh benefits). However, in 2017, the 'state of the evidence' for the around 3000 treatments assessed by Clinical Evidence using randomised-controlled trial (RCT) evidence suggested that around 50% of treatments were categorised as 'Unknown effectiveness' for specific indications. Cochrane Clinical Answers (CCAs) also aims to inform decision making by making Cochrane review evidence more accessible and actionable, and faces similar challenges regarding uncertainty.
Objectives: To assess the 'state of evidence' for treatments assessed in 1000 CCAs, using a similar categorisation to that devised by BMJ Clinical Evidence, in particular focusing on highlighting the proportion of CCAs affected by insufficient RCT data.
Methods: An assessment of 1000 CCAs covering a wide range of clinical disciplines, including Cardiology, ENT

disorders, Emergency Care, Mental health and Pregnancy & Childbirth, was performed. Each answer was categorised as to whether it provided guidance to: 'use treatment', 'use treatment but some caveats', 'do not use treatment', or 'treatment effectiveness unknown'.
Results: Assessment of 1000 CCAs suggests some parity with the results of the BMJ Clinical Evidence, with 18% of CCAs giving guidance to 'use treatment', 35% suggesting 'use treatment but some caveats' (as to how/when to use, need to balance benefits and harms, or doubts about the strength of the evidence), 9% suggesting 'avoid use', and 38% treatment effectiveness unknown.
Conclusions: CCAs are a great tool to filter the vast amount of data from Cochrane reviews and the RCTs they summarise to make it easier for healthcare professionals to apply high-quality evidence when managing patients. However, there are many questions for which we do not have a clear answers where the main strength of CCAs is to quickly highlight that clinicians need to apply expert judgement and non-randomised evidence.

18904
Using systematic reviews to identify the essential components of interventions: the example of parenting

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Background: Most complex interventions in psychosocial care deliver a package of knowledge and skills, but rarely is it clear which of their many components are necessary or effective. Elucidating the essential components of interventions could help develop programmes that are briefer, more effective and efficient, and provide a benchmark for assessing the content of interventions that lack formal evidence. These goals are particularly important in low-resource settings, where effectiveness, cost, scalability and sustainability are paramount considerations, and local evidence may be lacking.
Objectives: This project illustrates multiple approaches to elucidating essential components, using the example of parenting interventions, which are prominent in global policy recommendations and implementation efforts (e.g. WHO, UNICEF, UNODC), for preventing violence and improving child outcomes.
Methods: We systematically reviewed evidence from each of 6 methods to identify effective components of existing parenting interventions. The methodological strategies were: 1: Meta-analysis of associations, to test whether interventions with certain components are less or more effective than those without this component (or combination of components); 2: Meta-analysis of 'Decomposing', multi-arm trials, which test different combinations of components of parenting interventions in different trial arms; 3: Meta-analysis of microtrials - focused randomised experiments to test the causal effects of individual intervention components; 4: Secondary mediation analyses within trials, testing changes in parenting that predict child outcomes — mechanisms of change can reflect components that contributed to change; 5: Systematic review of expert opinion/consensus methods for identifying the essential components. 6: Optimisation studies, e.g. factorial trial designs. Results and conclusions: We describe strengths and weaknesses of each method, in terms of strength of causal inference, and generalisabiity to 'real-world' interventions; summarise findings from each strategy (some 200 RCTs included); and, discuss implications for scaling up of these common interventions.

19150
Readiness of Parliaments to engage with the Sustainable Development Goals: Implementability of the Inter-Parliamentary Union's Self-Assessment Toolkit

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Background: National parliaments have a key role in enacting legislation, allocating budgets, representing the voice of the people and ensuring accountability for effective implementation of national and global frameworks. One such framework is the 2030 Agenda for Development embedded in the Sustainable Development Goals (SDGs).
Objectives: Question is "What is the state of preparedness of parliaments to engage and ensure realisation of the Sustainable Development Goals?"
Methods: In 2016, the Inter-parliamentary Union (IPU) and the United Nations Development Programme (UNDP) designed a self-assessment toolkit for parliaments and legislatures. The self-assessment toolkit was launched in Kampala, Uganda on 3 March 2017 during the regional seminar on SDGs for parliaments of sub-Saharan Africa.
Results: The main objectives of the toolkit are to assist parliaments and their members to: assess their preparedness to engage with SDGs and identify additional strategies, mechanisms and partnerships to support implementation of SDGs more effectively. The toolkit provides a framework for discussion by asking 8 self-assessment questions, these are: building understanding of the SDGs in parliament, bringing the SDGs from the global to the local level, mainstreaming the SDGs within parliamentary mechanisms, making laws in support of the SDGs, financing SDGs, monitoring SDG implementation, engaging with the public and ensuring the SDGs serve the most vulnerable.
Conclusions: Through the self-assessment process, parliaments in both developed and developing countries can discuss issues, gather information and answer questions that will help them make informed decisions about the most suitable and effective ways to engage in SDG implementation. This paper unpacks the 8 self-assessment questions in the toolkit and sets an agenda for discussions on its application to assess the readiness of parliaments to engage with and commit to the aspirations of SDGs. The author strongly believes that the audience will be inspired to embrace the toolkit and apply it in their unique settings.

19319

Development and validity testing of the AGREE-REX, a tool to evaluate the clinical credibility and implementability of clinical practice guideline recommendations

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Background: While there is growing evidence that clinical practice guidelines (CPGs) can improve clinical and health-system outcomes, their degree of impact is influenced by their quality and implementability. Resources exist to improve overall methodological quality of CPGs; however, few resources are available to optimise clinical credibility and implementability of CPG recommendations.
Objectives: To develop and validate a tool to evaluate the clinical credibility and implementability of CPG recommendations.
Methods: The 11-item AGREE Recommendation EXcellence (AGREE-REX) tool was developed based on a realist review of the literature and input from the international CPG community. International CPG developers and users were recruited to apply the draft AGREE-REX to an assigned CPG and complete an online survey about the usability of the tool. The survey consisted of questions using a 7-point Likert response scale and open-ended questions.
Results: Three hundred and two individuals applied the AGREE-REX to a CPG and completed the AGREE-REX usability survey. Participants agreed that the AGREE-REX was easy to use (mean [m]=5.42/7) and they felt confident in applying the tool (m=5.05). Respondents also agreed that the AGREE-REX would be useful for CPG evaluation (m=5.83); development and reporting of CPGs (m=5.97); and, deciding whether to adapt/endorse (m=5.73) or implement (m=5.68) a CPG. Multiple participants suggested the addition of more guidance about how to apply each of the AGREE-REX items to a CPG, including examples. AGREE-REX scores indicated that there are areas for improvement in CPGs related to consideration of values and preferences of all stakeholders and implementation issues.
Conclusions: Results indicate that CPG developers and users find the tool useful for assessing factors related to CPG clinical credibility and implementability. Survey results were used to further refine the tool for better

application. The AGREE-REX will assist CPG developers to create clinically credible recommendations and assist CPG users to assess and select CPGs with trustworthy recommendations that are appropriate for implementation in their setting.

Long oral session 13: Rapid guideline development

18413

Health Emergency Interim Guidelines: Designing a tool-kit for WHO

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Background: The World Health Organization (WHO) has a central role in preparing for, responding to, and supporting the recovery from public-health emergencies. Guidelines are fundamental to accomplish this mandate, however, emergency situations challenge traditional guideline-development processes and tools because of condensed timelines, paucity of structured data and shifting needs in the field.
Objectives: To describe production processes and to present development tools for health emergency interim guidelines (HEIG) when there are no existing suitable guidelines and guidance is needed in less than 4 weeks.
Methods: These tools were developed at WHO using an iterative, consensus-based approach by experts in guideline development and response to public-health emergencies (all types of hazards). The basis for these tools is standard guideline methods and existing adaptations for rapid reviews and rapid advice guidelines. We applied these approaches to guidelines developed by WHO in the context of Zika virus disease to refine and improve the tools.
Results: Steps for developing HEIGS include: 1) determine knowledge needs and gaps in the field; 2) prepare a brief work plan (basis for the guideline); 3) constitute an expert panel, examine and manage their declarations of interest; 4) identify and synthesise evidence; 5) prepare evidence-to-decision frameworks; and, 6) formulate recommendations (by the expert panel). We provide explicit, pragmatic guidance on each of these steps, including templates, algorithms and checklists to facilitate the work. We present a case study of a Zika virus-related guideline that followed these steps and was produced in 3 weeks.
Conclusions: Guidelines produced in public-health emergencies must respect the same development principles and quality standards for guidelines in other contexts: they must be transparent, contain explicit methods, minimise the risk of bias, and reflect all relevant perspectives. The HEIG processes and tools designed by WHO outline an approach that adheres to these principles while meeting specific challenges brought by public-health emergencies.

18636

Accelerated Developed Guidelines : the French 4 years Experiment

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Background: There has been an increasing demand from policy makers to have rapid access to evidence-based decision support. In this context, the French National Authority for Health (HAS) has developed and tested a method to develop guidelines in an accelerated way.
Objectives: To assess a flexible accelerated developed guidelines (ADG) method.
Methods: An ADG core model was defined and flexible key elements to accelerate the process were tested.
Results: Over 4 years, 37 ADG were produced in different areas in a short amount of time: 6 months [3-9]. Criteria initially established for prioritisation according to the national context were adopted: time requirements, type of data available, updating needs, number of questions to assess, lack of controversy among health professionals

regarding the topic, etc. We focused on 3 major elements to accelerate the process: • restricted analysis to high-level evidence; • optional working group; and, • no peer review but mandatory consultation of stakeholders. Other minor elements were also considered: experienced experts implication, restricted number of experts and meetings, preferentially electronic tools used, etc. New deliverables in a short format (3-6 pages) were designed but all information was available on the website for transparency.
Conclusions: HAS adopted the method for developing rapid and trustworthy guidelines. The assessment is on progress and the results will be presented during the summit, as well as their relation with the need to update guidelines. Innovative and standardised approaches are needed to ensure scientific rigour in the development of accelerated guidelines. This experience will be shared with the members of the GIN Accelerated Guideline Development Working Group (AGD)-WG.

18680

An emerging digital and trustworthy evidence ecosystem for malaria: Rapid creation and dissemination of trustworthy recommendations in Africa

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BACKGROUND: Treatment of HIV represents a global challenge but also an opportunity to explore how innovations in an emerging Digital and Trustworthy Evidence Ecosystem could make a difference in Africa and other Low and Middle Income Country (LMIC) settings. OBJECTIVES: We aim to respond to new evidence for treatment of HIV with the rapid creation, dissemination and implementation of trustworthy recommendations at the point of care in Africa. METHODS: Figure 1 visualizes the Digital and Trustworthy Evidence Ecosystem for this case study. Here, evidence producers have published a trial on pregnant women with HIV. This potentially practice-changing the new evidence was presented to a collaborative network of clinicians, patients, researchers and experts in systematic review and guideline development (Rapid Recommendations panel). The panel created and published trustworthy recommendations, evidence summaries and decision aids within 90 days, following well defined methods and processes (BMJ Rapid Recommendations). Dissemination was performed through the BMJ in novel publication formats and through www.magicapp.org in digitally structured multi-layered presentation formats available "online and offline anywhere, anytime on all devices". Selected practices in Africa then worked to actively implement the trustworthy recommendations, followed by evaluation and improvement of care, also to study barriers and facilitators of the evidence ecosystem in an LMIC setting. RESULTS: We will present the BMJ Rapid Recommendations for HIV within the Evidence Ecosystem, including barriers and facilitators for active implementation and evaluation of delivered care in Africa. CONCLUSIONS: The Evidence Ecosystem for HIV exemplifies opportunities for closing the loop between new evidence and improved care but also remaining challenges, some likely to be particular for LMIC settings.

Attachments: Figure 1- Evidence Ecosystem for Malaria.pdf

18708

When to call upon a working group of experts to produce recommendations using an Accelerated Developed Guidelines (ADG) method?

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Background: The ADG method is used by the French Health Authority to produce recommendations in a short period of time (6 months) in a short format (2-page document). These recommendations are developed on the basis of a rigorous method including a systematic review of the literature and the request for stakeholders' opinion. This method may include a multidisciplinary working group of experts. The choice of method occurs when defining the scope of the guidelines.
Objectives: To identify which features of a topic are relevant in order to opt for an ADG method with or without a working group.
Methods: The scope of three ADGs (one among them involving a working group) was retrospectively analysed regarding existing controversies, the extent of the topic, the need for contextualisation with the French healthcare system, healthcare professionals involved and available literature.
Results: The three ADGs analysed were about: (i) child abuse; (ii) foetal alcohol spectrum disorder; and, (iii) uncomplicated urethritis and cervicitis. For the three ADGs, the topic was targeted and systematic reviews or international clinical guidelines were available. ADG (i) which included the participation of a working group was characterised by no major debate, the need for literature data contextualisation with the French health system and the involvement of many healthcare professionals along with many child-protection organisations, and patients and healthcare users' organisations. For the ADGs (ii) and (iii), data were sufficient and didn't involve a transposition into the French context.
Conclusions: An ADG method with a working group may be valuable for topics with the absence of controversy and that nonetheless require a contextual setting of literature data with the French health system.

Long oral session 14: Issues in Global Health

18163
Celebrity Deathmatch: Burden of disease vs. RCTs in the Southern cone of Latin America

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Background: It is not new that only a tiny percentage of the world's resources for health research and development (R&D) are spent on the health problems of developing countries, which represent almost all of the world's burden of preventable mortality. The south cone of Latin America (S-LA, Chile, Uruguay and Argentina) is no exception.
Objectives: To compare the ranking and frequency of conditions that produce a greater burden of disease according to IHME's GBD and to compare it with the ranking of those same 10 conditions regarding registration of clinical trials in the ClinicalTrial.gov database for S-LA from inception to February 2017. Also to explore sources of funding and the evolution of trends in the last four 5-year periods.
Methods: We manually reviewed the health condition or problem studied, the intervention and the primary sponsor by examining the registered record in CTGov database, for the countries specified above, and then coded the data according to ICD-10 (Table 1). We retrieved GBD rankings of DALY-producing conditions from http://vizhub.healthdata.org/gbd-compare. We also included geographically relevant conditions such as Maternal causes, Chagas disease, Dengue and TB. Analyses were done in Stata® 14.1.
Results: A total of 660 RCTs came from S-LAC considering the top DALY-producing conditions according to IHME's GBD, out of 2744 registered in CTGov from the database (24%, Table 2). Eighty one per cent (81%) of trials were funded exclusively by the industry (Table 3). No important changes in patterns of frequency of conditions were observed in the last 20 years (Table 4).
Conclusions: This landscape study confirms little correlation between burden of disease in S-LA and the distribution of topics addressed in clinical trial research, although RCTs may capture only a small proportion of all-incident research in the countries, and this could vary according to the condition considered.

Attachments: Table 1.png, Table 2.png, Table 4.png, Table 3.png

18248

Using science, technology, innovation and partnerships to accelerate development outcomes: Identifying priorities for new evidence generation and synthesis

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Background: Science, technology, innovation and partnerships (STIP) play an important role in accelerating the outcomes of development programmes. Policy makers need evidence about what works and what does not. For the greatest benefit, we need to know which questions are the highest priority for development stakeholders.
Objectives: We will describe the breadth, depth and features of the existing STIP-related impact-evaluation evidence base and compare it to the demand for new evidence to identify priority areas for new investments in research and synthesis.
Methods: To identify these priorities, we developed an evidence-gap map (EGM), which systematically catalogues the supply of impact-evaluation evidence on a framework of intervention and outcomes categories. We also assessed stakeholder demand for new evidence, using a variety of sources, including expert consultations and a stakeholder survey. We then compared supply and demand.
Results: The EGM identifies 320 completed impact evaluations on the effectiveness of STIP-related interventions. There are only 7 completed systematic reviews identified in the map - a small number, given the density of completed impact evaluations we found. Moreover, the reviews contain very few of the impact evaluations identified in the EGM. Our assessment of demand identifies several intervention types, primarily within the technology, innovation and partnerships categories. Combining the two, we find several priority areas for new investment. Priority areas for investment in new impact evaluation research: • technology interventions using biometrics and data-systems development; • policies to develop digital infrastructure; • innovation ecosystems programmes in sub-Saharan Africa; and, • digital inclusion interventions that target marginalised populations and women. Clusters of similar studies promising for systematic review: • technology-related interventions such as mobile-money systems, SMS services for agriculture, and several m-health interventions; • Innovation ecosystems programmes in Latin America; and, • results-based financing programmes for health.

18659

Lean experiments - Filling the evidence gap

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The traditional delivery of development assistance makes it difficult for development-sector organisations to test new approaches to poverty reduction. As a sector we often commit to mid- or long-term programme designs without first collecting evidence and knowing whether the intervention is having the intended impact. This can lead to programmes and investments that are producing sub-optimal results. The good news is that the development sector is increasingly paying more attention to evidence collection in order to find the most effective approaches to poverty reduction and to guide investment decisions. Randomised-controlled trials (RCTs) remain the gold standard for previously unproven interventions. However some gaps persist: + Due to the large scale, time and investment required, only a limited number of RCTs can be conducted. + RCTs are not appropriate for early stage interventions that may need many rounds of refinement before larger commitments are made. There is therefore a huge opportunity to conduct rapid and lean evidence collection. Together with partners in the development sector, Kopernik (www.kopernik.info) rapidly tests interventions in real contexts to determine their potential to reduce poverty effectively, and collects and analyses data on their effectiveness. These learnings also feed into improving the intervention design. Such experiments and datasets are typically relatively small because central to this approach is to test solutions and measure impact in an efficient and rigorous (though not

statistically significant) manner. While RCTs are still the gold standard for previously unproven interventions, leaner research methods are more appropriate to early stage interventions and new poverty-reduction approaches typically made possible by technological advances. This approach is complementary to other methods and builds a much-needed pipeline of promising solutions that deserve larger-scale testing and evidence collection. Several examples of such experiments that Kopernik has conducted with partners will be presented.

18859

Hard times: consideration of the resource impact of recommendations

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Background: In England, demands on the health and social-care services have increased significantly, while funding has not increased to match these demands. To help ensure the best use of limited resources, NICE's Board now requires that resource-impact considerations should inform how Guideline Committees make recommendations.
Objectives: To describe how consideration of resource impact in addition to cost-effectiveness has influenced decision making within NICE guidelines.
Methods: The following guidance has been developed by the NICE Resource Impact team with input from those commissioning services: • Resource impact should be considered for each of the first 5 years of implementing the guideline. • Resource impact is defined as substantial if: o the resource impact of implementing a guideline recommendation in England is more than £1m per year, or o the resource impact of implementing the whole guideline in England is more than £5m per year. In addition, the following practical steps and principles have been developed to support guideline committees: • identifying and prioritising areas that have the potential to result in substantial cost increases during guideline development for economic analysis; • providing information on likely costs earlier in the guideline-development process; • recognising that cost pressures should not be introduced into the system unless the committee is convinced of the benefits of the recommendation; • requiring that economic analysis must be undertaken if committees wish to make recommendations that are anticipated to substantially increase costs; and, • engaging with stakeholders regarding resource impact.
Results: We will describe how these processes have been applied to a real NICE guideline. We will articulate the distinction in methods between cost-effectiveness and resource-impact analyses, as well as discussing how these elements are considered and balanced in the decision making of the committee.
Conclusions: There is now a greater need for NICE Guideline Committees to be rigorous and explicit in considering and communicating the underpinning economic evidence and case for investment.

Long oral session 15: Consumer involvement in research

18465

How are stakeholders involved in systematic reviews? Findings from a systematic review of methods.

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Background: Recognising that it is good practice, researchers are increasingly expected to involve stakeholders (i.e. patients, the public, health professionals and others) in systematic reviews, but there is currently a lack of

evidence about how to do this.
Objectives: We aimed to synthesise evidence relating to stakeholder involvement in systematic reviews, and identify and describe methods of involvement.
Methods: A mixed-method synthesis of evidence, comprising (1) a scoping review to create a broad map of evidence; and, (2) a synthesis focused on evidence where methods of involvement were described. We comprehensively searched electronic databases (from 2010), completed pre-defined hand searching, and contacted experts. Two reviewers applied inclusion criteria. Papers from the scoping review judged to provide an adequate description of methods were included in the focused synthesis. Details of methods of involvement were extracted using pre-defined headings, presented in tables and described narratively.
Results: 12908 titles screened; 662 full papers considered, of which 294 met inclusion criteria for scoping review. 126/294 papers included in focused synthesis; 38/126 provided a good description of methods of involvement. Levels of involvement of stakeholders ranged along a continuum from minimal involvement to control (e.g. consumer authors). Involvement could be classified as either 'continuous' (throughout the review process) or 'one-time' involvement. Stakeholders could be described as having a managerial, oversight or responsive role. Examples of involvement were identified at all stages of the review process. Formal consensus decision-making techniques (Delphi approach, nominal group technique, ranking, voting) were used in almost half of identified examples.
Conclusions: There are a wide range of different methods for involving stakeholders in systematic reviews, and many are adequately described in current literature. Cochrane Learning have created learning resources based on this evidence which will support review authors in selecting and implementing methods of stakeholder involvement in future reviews.

18948
The impact of public comments on the development of methodology standards for patient-centred outcomes research

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Background: Comparative-effectiveness research has the potential to improve the evidence needed by patients and clinicians to make individualised choices among healthcare options. New evidence must be grounded in good science and methodology standards provide the basis for scientific integrity. Development of standards can benefit from stakeholder involvement. The Patient-Centered Outcomes Research Institute (PCORI) developed methodology standards with the goal of encouraging research and trustworthy information that helps patients and clinicians make decisions. These standards outline the minimal requirements for scientifically valid patient-centred outcomes research. A public comment process was used in the initial development of standards in 2012 and revision in 2016.
Objectives: To assess the extent to which public comments influenced the original and revised methodology standards; describe the changes made to the standards in response to public comments; and, summarise the past experience and future plans for continuing to solicit and respond to public comments as part of developing methodology standards.
Methods: This is a qualitative assessment of the public comments and resulting changes in standards. All comments were organised by topic, analysed across all topics, and categorised by content and functional themes. We compared drafts to revised standards to assess the impact the comments had on the final version.
Results: In 2 cycles, PCORI received 140 submissions with over 1500 individual comments. The 1st cycle contained more comments about the purpose and development of the standards, while the 2nd cycle focused on new standards, clarification of meaning, and simplifying wording. In both cycles, comments included suggestions for additional standards. Comments led to the addition of standards and revision of standards and text in every topic. Approximately 25% of the revisions were substantive, while 75% were to improve clarity. Conclusion: Public comments are effective for engaging stakeholders in creating standards for research. Use of public comments is expected to increase the influence and utility of these standards.

19233

A linked-evidence synthesis evaluating interventions aiming to improve the mental health of children with long-term conditions: Reflections on stakeholder consultation

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Background: We have recently completed a project which involved two linked systematic reviews and an overarching synthesis evaluating the effectiveness and experiences of mental-health interventions for children and young people (CYP) with long-term physical conditions (LTC). We engaged in stakeholder consultation throughout the review to incorporate the insights of a range of practice-facing evidence end-users, with the aim of enriching the review and increasing its applicability, transferability and visibility. Aim: To describe the process of involvement of evidence end-users within a linked-evidence synthesis project, share the outcomes, and reflect on lessons learned and value added. Approach: Our review team consulted with academic topic experts, clinicians, charities, CYP with experience of LTCs and mental ill health and their parents. Consultation occurred throughout the project and included a 6-week dedicated consultation period during the final synthesis stages. We aimed to gather input on search terms and definitions; approaches to data extraction and synthesis; interpretation of findings; dissemination channels; plain language summaries; and, implications for clinical practice. Impact on project: Throughout the review, consultation influenced the team's approach. This influence ranged from planning search terms and inclusion/exclusion criteria, through the use of language around mental and physical health, to helping validate emerging findings from the overarching synthesis. We also benefitted from an array of dissemination channels and opportunities for collaboration and knowledge transfer. We have identified a number of challenges in communicating research progress to different audiences and ensuring that planned activities are valuable to all parties.
Conclusions: Consultation with a range of stakeholders was valuable to the review team, and impacted on every stage of the review. In particular, we valued consultation in aiding the interpretation of evidence and facilitating dissemination amongst key target audiences.

19347

Involving health workers by placing them in the centre: how Human-Centred Design can positively impact research and evidence synthesis

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Background: The PHISICC project is a collaboration between public-health researchers and human-centred

design (HCD) practitioners. Using the HCD approach, the project aimed to re-design and test paper-based health information systems (HIS) to facilitate better decision making, data quality, and improve health outcomes.
Methods: We carried out a systematic review of global evidence on the effects of interventions to improve HIS, coupled with fieldwork to gather contextual evidence in Côte d'Ivoire, Nigeria and Mozambique. For the fieldwork, the public-health researchers focused on (i) reviews of records and reports; (ii) data quality verification exercises; and, (iii) inventory studies. The designers interviewed staff and patients, observed daily workflows, and engaged health workers in a co-creative dialogue to rethink the design of paper-based data tools, including how current tools could be improved to best facilitate their workflows and decision needs.
Results: HCD unveiled that paper-based HIS are largely created to serve the needs of stakeholders receiving data rather than the people recording it; are not adapted to actual workflow; and, do not support health workers' decision-making needs. HCD allowed us to understand the dynamics of the HIS tools when they are used by the facility staff, thus gaining insights into stumbling blocks and bottlenecks in the HIS and how these affect daily work. This challenged our research question and approach to the systematic review. Tools found to be effective in a systematic review may still cause challenges and be misaligned with the needs of health workers in practice.
Conclusions: (1) Involving people in research entails changing a perspective: from health systems devices and tools to human experience; from context to human expectations; from facilitators and barriers to human interaction. (2) HCD emerged as an insightful tool to understand not only contextual issues but also theoretical frameworks and how interventions may work. It also boosted the relevance of the systematic review. (3) HCD can be more widely applied to understand and intervene on how evidence is used by stakeholders and policy makers.

Long oral session 16: Evidence 2 Practice

Implementation of a structured medication handover process: An evidence-based project

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Background: Medication errors may result in adverse patient outcomes. In 2015, there were 9 medication errors in a respiratory unit. This was attributed due to lack of communication between the nurses and variations in handover of medication at every shift.
Objectives: To reduce incidences of medication errors to 0, and to achieve 100% compliance rate of nurses practicing the structured handover of medication.
Methods: This project was commenced from January to December 2016. There were a total of four phases. Phase I involved analysis of medication incidences, retrieved from the best-available evidence to reduce medication errors from JBI COnNECT+ (Clinical Online Network of Evidence for Care and Therapeutics). The audit criteria were developed from the JBI Practical Application of Clinical Evidence System (JBI PACES). At phase II, JBI Getting Research into Practice (GRIP) module examined the barriers and identified interventions to improve the medication handover process. These included nurses receiving training sessions on how to use the acronyms 2DARTS for medication handover and utilisation of the pictorial guide. Phase III and IV involved post implementation and sustainment audits. Results. The sustainment audit results has shown compliance compared to the pre-implementation and the sustenance phase. The handover of route of medication administration increased from 50% to 100%; Name, dosage and frequency of medication increased from 67% to 100%; Time of last-administered dose increased from 50% to 90%; Time of next dose increased from 50% to 90%; Used of sliding scale increased from 75% to 90%; and Documentation of omission reason increased from 74% to 75%. There was no reported incidence of medication error during the period from October to December 2016.
Conclusions: Medication errors has significantly improved due to nurses' compliance in the structured medication handover process.

Attachments: Medication Handover Abstract_ Issac_ML.pdf

18068

CADIMA: An Open Access online tool supporting the reporting and conduct of systematic reviews and systematic maps

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Systematic reviews and systematic maps represent powerful tools to identify, collect, evaluate and summarise primary research pertinent to a specific research question or topic in a highly standardised and reproducible manner. Even though seen as the 'gold standard' when synthesising primary research, systematic reviews and maps are typically resource-intensive and complex activities. Thus, managing the conduct and reporting of such reviews can become a complex and challenging task. Here, we introduce the open-access online tool CADIMA, which was developed in collaboration between the Julius Kühn-Institut and the Collaboration for Environmental Evidence in order to increase the efficiency of the evidence-synthesis process and facilitate reporting of all activities to maximise methodological rigour. Furthermore, we provide an overview of how CADIMA can be used to support review teams during the synthesis process by: 1) guiding review authors through the evidence-synthesis process by providing a step-by-step framework; 2) facilitating remote, digital co-operation between team members; 3) reducing the overall workload by increasing efficiency during conduct; and, 4) facilitating and standardising the documentation of the synthesis process.

18846

Individual, institutional and network factors affecting academic researcher engagement with policy: What can universities do?

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Background: Much policy-relevant research is produced by academic institutions such as universities. However, the onus of ensuring it influences policy often rests on the researcher. Placed traditionally at the research side of the paradigm, academia perhaps serves an untapped role as a knowledge broker to bridge the evidence-policy divide.
Objectives: The purpose of this study was to understand the facilitators and barriers that affect academic faculty at The Johns Hopkins Bloomberg School of Public Health (JHSPH), USA to engage in the evidence-to-policy process at various government levels.
Methods: Between May and December 2016, 211 (32%) of 651 eligible full-time faculty across all 10 departments at JHSPH participated in a survey focused on various aspects of engagement with decision makers with one section specific to facilitators and barriers. Surveys were conducted face to face or via skype. Descriptive data as well as tests of association using STATA informed our results.
Results: More than three quarters of respondents identified colleagues with ties to policy makers, being affiliated with JHSPH, and conducting policy-relevant research as the highest facilitators. Several respondents identified time constraints, academic incentives and financial support as important factors. Preliminary analyses show statistically significant associations between departmental affiliation and whether departmental culture and knowledge-translation skills were facilitated.
Conclusions: The data suggest that individual, institutional and network factors affect the willingness and ability of academic faculty to use their knowledge and expertise to encourage and influence evidence-informed decision making (EIDM). Academic institutions such as JHSPH should a) periodically undertake such pulse-checks within their institutions; 2) enhance individual capacity strengthening in knowledge translation and research communication; 3) institutionalise a culture of EIDM that considers academic incentives for decision-maker engagement; and,4) create a deliberate strategy to expand and nurture trusted, relevant networks and relationships with decision makers.

18911

Obtaining absolute effect estimates to facilitate shared decision making in the context of multiple-treatment comparisons

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Background: When engaging in shared decision making (SDM) clinicians and patients need to discuss the benefits and harms of available treatment options. To avoid framing bias, decision aids should present the evidence as absolute estimates of effect, but there is no established methodology to obtain them in the context of multiple-treatment comparisons.
Objectives: 1) To provide a methodologically sound framework to calculate absolute-effect estimates of multiple interventions in the presence and absence of a network meta-analyses (NMA), and with variable sources of baseline risk; 2) To implement this framework in an online prototype that generates decision aids for the clinical encounter from evidence summaries (www.MagicApp.org).
Methods: A group of methodologists with experience in systematic reviews, network meta-analysis, and SDM brainstormed on how to obtain absolute effects in the context of network meta-analyses (NMA), tested approaches in real datasets, and incorporated feedback from experts. We used data from the studies included in the network to inform the baseline risk for the intervention chosen as the reference, and tested the impact of the choice of reference and the sequence in moving from one treatment to the next. We will also explore the feasibility of using baseline risks from other sources, and applying this approach when no NMA is available.
Results: By multiplying the mixed effects of the basic comparisons with the chosen baseline risk, we can obtain the corresponding risks for the remaining interventions. Assuming that each corresponding risk is transitive in comparisons that contain the anchor intervention, we can obtain the corresponding risks pertaining to the functional comparisons. We will present this approach at the summit using real datasets from NMA, and illustrate how it can inform the creation of decision aids for the clinical encounter in our online prototype for multiple comparisons.
Conclusions: Obtaining absolute-effect estimates in the context of multiple-treatment comparisons remains a challenge, but is critical if we want such evidence to reach patients and clinicians and support actual SDM.

Long oral session 17: Network meta-analysis methods

18128

An empirical investigation of the impact of different methods for synthesising evidence in a network meta-analysis

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Background: Network meta-analysis (NMA) is a method to synthesise evidence from multiple treatments. Two broad approaches are available to synthesise data across networks: arm-based and contrast-based, with a range

of models that can be fitted within each. It is unclear how the two approaches compare and there has been limited empirical evaluation comparing results from different NMA methods applied to a large number of networks.
Objectives: To compare five different NMA models through the re-analysis of published networks of interventions with binary outcomes and investigate if characteristics of the network modify any differences.
Methods: We re-analysed a subset of 158 networks from a cohort of 456 published networks of randomised trials. The subset of networks included those where the primary outcome was binary, the number of events and participants were reported for each direct comparison, and there was no evidence of inconsistency in the network. We re-analysed the networks using five methods, three of which are contrast-based and two of which are arm-based models. We compared the estimated treatment effects, their standard errors, treatment ranks, and the metric on which the ranks are based, and the between-trial heterogeneity variance, across the NMA methods. We investigated if differences in the results are modified by network characteristics. Results and conclusions: Preliminary results show good agreement between the contrast-based, Bayesian and frequentist methods in terms of effect estimates and treatment ranks. However, differences are apparent in the effect estimates and ranks when comparing the arm-based method to the contrast-based methods.

18259
CINeMA: a web application to evaluate the Confidence In Network Meta-Analysis results

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Background: Policy makers and guideline developers face challenges in evaluating the quality of evidence from systematic reviews with multiple interventions. We previously developed a framework to judge the confidence that can be placed in results obtained from a network meta-analysis (NMA) based on the GRADE domains: study limitations, indirectness, inconsistency, imprecision and publication bias. The framework combines judgments about direct evidence with their statistical contribution to NMA results, enabling evaluation of the credibility of NMA treatment effects and treatment rankings. However, the process is cumbersome and time-consuming for large networks.
Objectives: To present a web application, CINeMA (Confidence In Network Meta-Analysis), that considerably simplifies the evaluation of confidence in the findings from NMA.
Methods: CINeMA provides an interactive, online process to determine the degree of confidence one can place in NMA results. Users upload a dataset (in .csv format) and are guided through the steps of the evaluation process. CINeMA optionally automates several of the methodological steps involved, e.g. by providing heterogeneity and inconsistency metrics and appropriate reference values for their interpretation. Information about study-level risk-of-bias assessments can be included in the uploaded data, and CINeMA evaluates study limitations in each pairwise comparison and in each NMA effect size. Standard NMA outputs (such as the network plot and the NMA effect sizes) are also provided.
Results: Using networks of different size and complexity, we show that CINeMA can greatly simplify the evaluation of credibility of NMA results. We will illustrate the application using data from a network of antihypertensive drugs for incidence diabetes.
Conclusions: Evaluation of the quality of evidence is a particularly important but challenging part of a systematic review with multiple interventions. CINeMA, with semi-automation of methods and via a guided online process, will greatly simplify the evaluation of the quality of NMA results and will improve transparency and reproducibility.

18511
Making the GRADE approach for network meta-analysis more efficient

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Background: Assessing the certainty of the evidence from a systematic review is a crucial task to draw appropriate conclusions. In systematic reviews that conduct network-meta analysis (NMA), this task can be perceived as onerous and time-consuming.
Objectives: To describe the conceptual advances that could improve efficiency when using the GRADE approach to assess the certainty of the evidence from NMA.
Methods: Members of the GRADE NMA working group have been working on strategies to improve efficiency when assessing the certainty of the evidence from NMA. We have conducted brainstorming sessions, testing of strategies in different networks, and incorporation of feedback obtained at GRADE working group meetings and other research meetings.
Results: We have identified and provided guidance with regards to three main strategies directly related to efficiency: 1) it is not necessary to address imprecision when rating the direct and indirect estimates that inform the rating of a network estimate; 2) it is not necessary to assess the indirect evidence when the direct evidence has high certainty, and contributes to the network estimate as much as the indirect evidence; and, 3) statistical tests of global incoherence are insufficient to address incoherence at the pairwise comparison level.
Conclusions: The uptake of GRADE to assess the certainty of estimates from NMA may be threatened by the effort required. We have developed strategies to improve efficiency that systematic reviewers can apply with due care to not compromise the quality of their assessments.

18515
Comparing Bayesian and Frequentist Approaches for network meta-analysis: An empirical study

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Background: Network meta-analysis (NMA) can be performed either under a frequentist (classical) or a Bayesian framework. With recent developments in frequentist software, more researchers use this approach for NMA; however, the extent to which the results of these approaches yield similar results remains uncertain.
Objectives: Our goal was to investigate the variability in results from frequentist and Bayesian approaches comparing the direct, indirect, and mixed-effect estimates as well as the ranking of the interventions in a sample of published networks.
Methods: We performed a systematic survey of the literature and included a sample of systematic reviews of randomised controlled trials (RCT) from the field of cardiovascular medicine that used NMA methods to compare the effects of more than two interventions with a dichotomous primary outcome. Eligible studies have to provide enough data to re-run the analysis including interventions assessed in each trial, number of events and number of patients per arm. To perform frequentist NMA network suite commands, STATA version 14.1 was used. The gemtc package (version 0.8, released on 2016-03-01) in R software was used for vague prior-Bayesian NMA.
Results: We re-analysed data from 14 NMAs. Included NMAs had 12 to 63 RCTs informing 4 to 12 interventions. On average, the absolute difference between Bayesian and frequentist odds ratios were 0.18 ± 0.20 across all comparisons (range from 0.00 to 0.65) in a fixed-effects model. For a random-effects model, the average absolute difference between Bayesian and frequentist odds ratios were 0.26 ± 0.44 across all comparisons (range from 0.00 to 1.58). Node-splitting results were almost similar in both approaches. SUCRA values were slightly different between the two approaches but most of the time treatment rankings were the same.
Conclusions: Our findings showed that magnitude of the effect estimates, but rarely the direction or treatment rankings, may differ to a large extent between Bayesian and frequentist approaches.

Long oral session 18: Efficiency in searching

18113

Assessing the validity of abbreviated literature searches in rapid reviews

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Background: Systematic reviews offer the most reliable and valid support for health-policy decision making, patient information and guideline development. However, they often do not meet the needs of those who have to make decisions quickly. Rapid reviews have therefore become a pragmatic alternative to systematic reviews. They are knowledge syntheses that abbreviate certain methodological aspects of systematic reviews to produce information more quickly. Methodological shortcuts often take place in literature identification. Potential disadvantages are less-reliable results. To date, the impact of abbreviated searches on estimates of treatment effects and subsequent conclusions has not been analysed systematically across multiple bodies of evidence.
Objectives: We aim to assess whether bodies of evidence that are based on abbreviated literature searches lead to different conclusions about benefits and harms of interventions compared with bodies of evidence that are based on comprehensive, systematic literature searches.
Methods: We used a non-inferiority design with the primary outcome: proportion of discordant conclusions based on different search approaches. We randomly chose 60 Cochrane reviews, and reproduced their MEDLINE, Embase and CENTRAL searches employing abbreviated search strategies. If abbreviated searches could not detect all studies included in the original review, we recalculated effect sizes, revised the original summary-of-findings table and asked review authors whether the missed evidence would change the conclusions of their report. We determined the proportion of discordant conclusions for each abbreviated search approach, and considered it as non-inferior if the lower limit of the 95% confidence interval of the proportion of discordant conclusions was below the non-inferiority margin, which was determined based on results of a survey for clinical and public-health scenarios.
Results: Will be available at the Summit.
Conclusions: This will be the first study to assess whether the reduced sensitivity of abbreviated searches has an impact on conclusions across multiple bodies of evidence, not only on effect estimates.

18866

BADERI: an Internet-based platform to co-ordinate handsearching activities. Implementation and early results

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Background: The implementation of a handsearching strategy is an invaluable complement to electronic searches when identifying references to controlled clinical trials (CCT). We have developed BADERI (Database of Iberoamerican Clinical Trials and Journals, by its initials in Spanish), a free, Internet-based database to co-

ordinate handsearching activities across different countries and institutions.
Objectives: To present the main features of BADERI and discuss their applicability to facilitate and expedite handsearching activities. To present the early results of the implementation of BADERI.
Methods: Database development and descriptive analysis. Stakeholders involved in the handsearching process participated in brainstorming and discussion sessions to discuss the features and design of BADERI. The database was then pilot-tested and iteratively assessed and revised. Once finalised, BADERI was adopted for the completion of handsearching projects of CCTs in geriatrics, ophthalmology, gynaecology, dermatology and dentistry, among others, all conducted collaboratively by volunteers located remotely. The development of BADERI was partially funded by the 2014 Cochrane Discretionary Fund.
Results: BADERI can be accessed at www.baderi.com/login.php. It serves as a repository of handsearched journals and identified CCTs; this information can be directly uploaded to CENTRAL using a built-in feature that exports reports in ProCite format. BADERI also has an administration subsection to monitor the roles of volunteers and the progress of each handsearching study. Besides the ProCite reports, BADERI allows exporting spreadsheets that can be filtered per journal(s), country(ies), or medical specialty(ies). Currently, there are over 6000 references in BADERI, all of which have been submitted to CENTRAL.
Conclusions: ADERI has features that could prove useful to overcome the logistical challenges entailed in handsearching projects.

18923
Optimising search filters for active literature surveillance: a concordance study

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Background: A major challenge in keeping clinical guidelines and structured recommendations current is to identify new, relevant evidence in a resource-efficient way. Prior research found that sensitivity (minimising the number of missed relevant references) or efficiency (low number needed to read, NNR) can be adjusted over a wide range, spanning from the high efficiency/low sensitivity of the McMaster Premium Literature Service (PLUS) to the high sensitivity/high NNR of the PubMed Clinical Queries.
Objectives: We explored the concordance of the Clinical Queries/PLUS approach with the systematic literature surveillance process used for systematically updating an evidence-based clinical reference (DynaMed Plus) and derived a search approach with an optimal balance of sensitivity and efficiency.
Methods: We identified all articles representing primary evidence with a publication date of 2015 that were included in either PLUS (clinically valuable evidence selected based on strict methodologic criteria) or DynaMed Plus (the best-available evidence to answer clinically relevant questions). We assessed concordance of different filtering strategies against this empirical set from a composite of 503 clinical journals. We assessed sensitivity and NNR of 3 main search strategies and several combinations.
Results: The reference standard included 6720 articles. A sensitive PCQ-based strategy had relative sensitivity 0.96 and NNR 11.5. A balanced strategy using free-text search to capture pre-publication record data developed with HEDGES technology from PCQ had relative sensitivity 0.86 and NNR 7.5. A DynaMed Plus-based strategy had relative sensitivity 0.95 and NNR 6. The different filters had variable performance within different subsets of journals.
Conclusions: A critical factor for an efficient filter strategy is the journal. A sensitive and more efficient surveillance strategy for clinically usable evidence can be achieved by developing journal-specific filtering approaches balancing sensitivity and efficiency. External validation of the optimal search strategy is under way.

19287
Using the RobotAnalyst text-mining application to boost efficiency of literature screening: experience from a systematic review in health services research

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Background: Text-mining technologies have great potential to reduce reference screening burden in systematic reviews. RobotAnalyst, a web-based tool for text mining and automatic classification, seems promising for assisting with screening in Cochrane reviews. However, it remains unclear whether and how barriers such as complex search topics, large reference-retrieval datasets, search strategies with high recall and low precision, poorly or recently indexed references, and limited experience of reviewers impact on RobotAnalyst performance as compared to manual screening.
Objectives: 1) To assess RobotAnalyst performance in identifying eligible references and reducing screening burden and time for reviewers. 2) To provide an account of reviewers' experience with RobotAnalyst usability.
Methods: We extracted references (title and abstract) from 6 databases for a review on measures of older inpatient safety based on administrative health data. Semi-automatic screening supported by RobotAnalyst is being performed by a junior and senior researcher. Its performance will be compared to manual screening by 2 senior researchers using standard Cochrane methodology. Yield, burden and median decision time will be measured during screening. Perceived usability of RobotAnalyst application will also be evaluated.
Results: Of 4964 extracted references, about 680 (13.7%) should be eligible for full-text retrieval. First results suggest that automatic classification has helped screen most of eligible references in the first phase of the review while reducing decision time from around 100 to < 20 seconds in the second phase (Figure 1). Manual and semi-automatic screenings by senior researchers are ongoing and performance data will be completed. RobotAnalyst usability could be improved by enabling reference de-duplication and annotation. Accounting for author list, tables/figures, and pre-specified keywords could also increase screening performance.
Conclusions: Our evaluative study should help systematic reviewers decide on whether using a text-mining tool, such as RobotAnalyst, is worthwhile for complex literature searches in public-health or health-services research.

Attachments: Figure 1.jpg

Long oral session 19: Linked data & data sharing

18854
Cochrane as a knowledge commons: an institutional analysis

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Background: The governance of common resources was the research area of Eleanor Ostrom, economist and Nobel laureate. The theory was that common resources are over exploited, and their care and sustainability is overlooked by users.
Methods: We took Cochrane as a knowledge commons, and applied Ostrom's framework to outputs; and then used Ostrom's Institutional Analysis and Development (IAD) Framework to appraise the resource, the community, and the governance and rules in use. We then examined the collective-action problems found associated with the 'commons', including free riding, commitment, supply of new institutions (rules and procedures), monitoring and feedback, compliance and dispute resolution. The analysis was carried out by a specialist in institutional analysis, working with people in Cochrane, drawing on existing documents and interviews.
Results: The quantity of reviews has expanded, with variation in numbers and quality between groups; access remains restricted; and, Cochrane has yet to consider carefully aspects of the permanence of the record. The IAD framework indicates a degradation of the specialist resource of methodologists and editors; rules in use are

informal but well known, with increasingly detailed procedural rules. Collective-action problems continue to cause problems in the organisation, with free riding being common. New rules and procedures are developed to help governance, but the organisation still has poor feedback mechanisms, and is without clear guidance for dispute resolution.
Conclusions: The analysis aims to provide a framework to reflect on governance of a knowledge commons and help more clearly articulate the problems arising in an established knowledge commons, and areas that need to be resolved to avoid degradation of the product and the resource.

18950
PICO annotation: harnessing crowds and experts in making health evidence more discoverable and re-usable

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Background: As part of the Cochrane Linked data project, we are annotating all Cochrane systematic reviews. Phase I, which ends in March 2017, involves annotating child-health reviews. The reviews are being annotated at two levels: review level (i.e. the question) and included study level (generating a PICO for each study). This work is part of a project funded by the Bill and Melinda Gates Foundation to generate a PICO-annotated evidence base of all Pregnancy and Neonatal Cochrane Reviews. Similarly, Cochrane Crowd (http://crowd.cochrane.org) has now rolled out a beta PICO task. This crowd task is aimed at surfacing the core PICO elements from reports of randomised controlled trials in the areas of pregnancy and child health. The outputs of each will feed the PICO concept browser and PICO Finder: two user interfaces that facilitate discovery of Cochrane Reviews and their included trials according to PICO.
Objectives: 1. To annotate all reviews relevant to child health using the Linked data annotator tool and ontology developed by the Cochrane Linked data team. 2. To create a Crowd PICO task that would enable high-quality annotation of titles and abstracts by a Crowd.
Methods: For the Crowd annotation, a search was run to identify potentially relevant reports of trials that had not yet been included in Cochrane reviews. We fed these citations into the beta Crowd PICO task. We developed a training module to help guide Crowd contributors through an interactive example. We then made the task available to all those who had screened a certain number of records for the RCT task. For the annotation of reviews, we focused our efforts on those reviews from the Neonatal and Pregnancy review groups. We recruited a small team of annotators and worked closely with Cochrane information specialists to ensure quality and consistent annotations.
Results: We will present results on the number of annotations performed by the Crowd and Expert annotators and the quality of those annotations across the four PICO elements.

19202
Cochrane consumers and data sharing of clinical trials - a survey; IMPACT (IMProving Access to Clinical Trials data) Observatory

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Background: As inclusion of the participant-level data (IPD) in Cochrane reviews would increase the reliability of evidence gained by these reviews, and speed knowledge creation, there is currently a great interest in and lively activity aimed at increasing public sharing of clinical trial (CT) data. The IMPACT Observatory is the methodology of choice for systematic assessment of this process which merits follow up due to its complexity. Observation or natural experiments assess the impact of interventions of one or several players with the goal of informing the process, in our case the transition of CT data sharing and reuse. The data-sharing culture of consumers as one of the key players is expected to play a crucial role in increasing the sharing and reuse of CT data.
Objectives: To explore the culture of members of the Cochrane Consumer Network (CCNET) regarding CT data sharing and reuse.
Methods: We conducted a web survey to assess the data-sharing culture of consumers. The survey, consisting of a short introduction and 28 questions, was sent to members of CCNET. This survey is part of the IMPACT Observatory set of surveys aiming at assessing the data-sharing culture of different stakeholders. Survey questions are designed to enable comparisons with findings from ongoing surveys of researchers and editors.
Results: We launched this survey in September 2016, and so far have received 69 responses. We will present the results of the survey at the Summit.
Conclusions: The CCNET survey will contribute to understanding and assessing the culture of consumers regarding sharing and reuse of CT data and thus inform the dynamics of the ongoing transition process of data sharing, including its barriers and opportunities.

19390

Next Generation Evidence System for Maternal and Child Health Evidence: A report on the Cochrane-Gates Foundation project

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Background: In September 2016 Cochrane received a grant from the Bill and Melinda Gates Foundation to accelerate our development of a 'next generation evidence system' in the areas of maternal and child health in support of the Gates Foundation's 'Healthy Birth Growth and Development Knowledge Integration' (HBGDki) initiative. The main aim was to use technology, domain experts, and the Crowd to create processes and tools to better curate evidence to improve discoverability.
Objectives: This presentation will give an update on the development and outcomes of this 6-month project, including key deliverables, metrics, and integration with Cochrane internal systems, as well as partners in the HBGDki community. We will introduce the key components of this work: the Cochrane Linked Data infrastructure, machine-learning evidence pipeline system, and the Cochrane Crowd component, and how they work together with domain experts, information specialists and a team of annotators and ontology developers to deliver a next-generation paradigm for evidence curation.
Methods: We will describe the technical development, ontology development, and engagement activities. Descriptions of the various tools, processes, and data structures used will be provided as well as any preliminary

validation that was done on performance. Issues encountered and methods used to overcome them will be discussed and explored.
Results: A summary of the key outcomes and measures of success for the project, including next steps for this work across the wider Cochrane community and dataset will be discussed as well as the implications for future development of Cochrane systems and processes.
Conclusions: Cochrane successfully completed a 6-month project with the Bill and Melinda Gates Foundation and key partners to accelerate the delivery of a next-generation evidence system for curation of maternal and child-health evidence. Lessons learned and next steps to inform future development within Cochrane and also potential future projects with Gates and partners will be discussed.

Long oral session 20: Systematic review publication processes

18412
Transitioning to living systematic reviews: Lessons learned from a large scale review on diabetes quality improvement interventions

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Background: Evidence evaluating quality improvement (QI) strategies designed to optimise diabetes management is rapidly growing, with almost 20 new RCTs published in English annually. Using traditional systematic review (SR) methods to synthesise this evidence is no longer sustainable, as reviews are in danger of being out of date by the time they are published. Living systematic reviews (LSR) which are 'continually updated, incorporating relevant new information as it becomes available', have been proposed as a solution to ensure rigorous, timely synthesis in rapidly evolving fields.
Objectives: To review our experience in transitioning a large-scale SR into a LSR, and to provide researchers with the information they require to conduct their own LSR.
Methods: A SR of 278 trials evaluating diabetes QI interventions was transitioned into a Cochrane LSR in 2017. Operationalising the transition of this review into a LSR required numerous methodological considerations, including when and how to update our search strategy, what databases to search, what screening platforms to use, when to update analyses, and the role of machine learning. The publication model also required deliberation to balance the need for maximum visibility and new citations/DOI with each publication, while minimising author/editor workload.
Results: We will review decisions that were made to ensure the successful transition of our SR into a LSR. We will reflect on the expert opinions received, and will integrate this knowledge with our own experiences. Methods to facilitate and streamline the process will be discussed, with a particular focus on capabilities of automation/machine learning. We will provide our final recommendations and thoughts, including suggestions on how other research teams might conceptualise the transition of their own SR into a LSR.
Conclusions: By detailing our decisions and experiences in transitioning an existing large-scale SR into an LSR, we hope to contribute to the discussion of the methodology for this novel, emerging field. Furthermore, we hope to provide researchers with the tools they require to make informed decisions for their own LSR.

18419
Cochrane Living Systematic Reviews: guidance, piloting and early evaluation

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Background: A number of Cochrane author teams are piloting Living Systematic Reviews (LSRs), with support from Project Transform and the Living Systematic Review Network. While LSRs promise to keep high-quality evidence syntheses continually up-to-date, they require some modifications to existing review authoring and editorial processes, and pose a number of technical and publishing challenges. As such, an evaluation of their feasibility, acceptability and ability to facilitate continual updating is warranted before wider implementation within Cochrane.
Objectives: To outline the Cochrane LSR pilot approach and report on pilot experiences to date in several LSRs, including implications for people and processes, as well as key barriers and facilitators.
Methods: The LSR Network has developed guidance on when to conduct an LSR, standard text for use in LSR protocols and guidance on how to identify, incorporate and present new data. An evaluation is ongoing, collecting quantitative data on workload implications (e.g. citations screened each month) and author and editorial team reflections via regular surveys, project documents and meeting minutes. We will also conduct semi-structured interviews with authors, editorial staff and other stakeholders at the conclusion of the pilots. Results and conclusions: We will present the proposed LSR-specific review methods and early evaluative data from the current pilot Cochrane LSRs, including implications for Cochrane, authors and editorial teams, and related evidence products. Barriers and facilitators identified to date will be discussed, including the feasibility of monthly searching and study identification supported by machine learning and Cochrane Crowd.

18476
Returning peer reviewer comments for Cochrane protocols and reviews via webinars: A pilot project

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Background: The publishing of Cochrane Reviews is sometimes slowed due to lengthy waiting times for peer-reviewer comments. A review author received a grant from the National Institute for Health Research to complete a suite of 30 Cochrane Reviews and chose to receive peer comments for the 18 placed with the Upper Gastrointestinal and Pancreatic Diseases Group through a series of interactive webinars. Objective: To accelerate the review process by facilitating communication between the author and all peer reviewers at one time. .
Methods: Our Managing Editor arranged mutually agreeable times for herself, the author and peer, statistician and consumer reviewers via Doodle Polls. Drafts for a pre-arranged number of protocols/reviews on similar topics were distributed prior to the agreed date to allow for peer preparation. The author presented these via PowerPoint presentations during live-interactive webinars to facilitate discussion. Additional comments were submitted directly to the author within several days of the webinar.
Results: This presentation will illustrate review timelines (Table 1); author impressions of the project; and, discuss the results of a survey distributed to all peer reviewers involved to obtain their views regarding the potential advantages and disadvantages of this pilot project as well as suggestions to improve the process. Survey responses were anonymous.
Conclusions: Although the primary objective in utilising webinars was to reduce the time taken to receive peer

comments and shorten the time taken to publish a review, benefits also included the involvement of all peer reviewers in the full conversation and immediate feedback regarding comments and questions raised during the webinars. All survey respondents said they would participate in similar webinars in future.

Attachments: ProgGrant.jpg

18784

From submission to publication of high-quality, high-impact reviews: the Cochrane Fast-Track Service

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Background: Cochrane is undergoing a Structure & Function Review, and, as part of this process, we are considering new methods to expedite the publication of high-quality reviews written by experienced author teams.
Objectives: The pilot Cochrane Fast-Track Service aims to offer the option of a fast-track editorial process for high-quality review submissions. In doing so, we also aim to improve the experience of the associated author teams.
Methods: Systematic reviews with a research protocol from demonstrably experienced teams will be considered for this pilot. The review topic area must be relevant for Cochrane, with clear justification of relevance to one or more external stakeholders. After an initial on-line submission and approval from the relevant Cochrane Review Group, reviews will be screened but only accepted into the pilot if minor or no revisions are required. Peer-review will be co-ordinated centrally by the Cochrane Editorial Unit, working collaboratively with Cochrane Review Groups. We aim for the editorial process to take 3 to 4 months from submission to publication.
Results: Preliminary results of this pilot will be reported.
Conclusions: Cochrane has developed a Cochrane Fast-Track Service to reduce the time to publication of high-quality reviews from experienced evidence-synthesis researchers.

Long oral session 21: Issues in systematic review methods

18356

Systematic reviews assessed as high risk of bias due to avoidable failures in searching: analysis of a data set of critically appraised systematic reviews

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Background: A substantial number of systematic reviews (SR) are failing to follow recommendations for the conduct and reporting of search methods despite the availability of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and the Cochrane Handbook for Systematic Reviews of Interventions.
Objectives: We aimed to analyse the main reasons for SRs being assessed as high risk of bias in Domain 2 (Identification and Selection of Studies) of the ROBIS Risk-of-Bias tool.
Methods: The KSR Evidence database has over 30 000 SRs critically appraised according to the ROBIS tool. These were filtered to those assessed to be of high risk of bias in Domain 2 and, from this set, a random sample was selected for further analysis.
Results: From our piloted sample we found the most frequent reasons for SRs receiving a high risk of bias assessment in Domain 2 was the failure to search for non-English publications; and no undertaking of supplementary searches additional to healthcare database searching, i.e. no hand searching, grey literature or citation searching. A substantial number of SRs failed to report search strategies and/or the study selection process adequately. Of the SRs assessed as high risk of bias in Domain 2, 98 per cent are ultimately assessed as

having a high risk of bias overall for the full review. Conclusion: SRs are being assessed as of high risk of bias in Domain 2 for reasons which, in some cases, could easily be avoided. Improved reporting and omission of language limits would add little extra work but could improve the academic rigour of and increase the value of the research undertaken. As SRs are expected to be transparent and reproducible, we believe common failures in this domain undermine the overall value of SRs and, in so doing, contribute to unnecessary research waste.

18473

Bivariate network meta-analysis of diagnostic test accuracy studies synthesising multiple tests and multiple thresholds

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Background: Network meta-analyses have extensively been used to compare the effectiveness of multiple interventions for healthcare policy and decision making. However, methods for evaluating the performance of multiple diagnostic tests are less established. In a decision-making context, we are often interested in comparing the performance of multiple diagnostic tests, at varying levels of test thresholds, in one simultaneous analysis.
Objectives: To develop a network meta-analysis framework in which diagnostic test accuracy data from multiple tests and thresholds can be synthesised and ranked in a single coherent analysis.
Methods: Motivated by an example of cognitive impairment diagnosis following stroke, we synthesised data from 13 studies assessing the efficiency of two diagnostic tests: Mini-Mental State Examination (MMSE) and Montreal Cognitive Assessment (MoCA), at two test thresholds: MMSE <25/30 and <27/30, and MoCA <22/30 and <26/30. We fitted a bivariate network meta-analysis model to account for the correlation between paired measures of test accuracy, i.e. sensitivity and specificity. Building on this model, we further incorporated constraints on increasing test thresholds, assuming that higher-test thresholds had an increased sensitivity but decreased specificity. All models were fitted in WinBUGS using Bayesian Markov Chain Monte Carlo (MCMC) methods.
Results: MoCA at threshold <26/30 appeared to have the optimal true positive rate (estimated sensitivity: 0.98; 95% credible interval (CrI): 0.93, 0.99), whilst MMSE at threshold <25/30 appeared to have the optimal true negative rate (estimated specificity: 0.82, 95%CrI: 0.73, 0.89). Both of which ranked in first place for 99% of MCMC iterations. Applying constraints on increasing test thresholds reduced between-study heterogeneity and increased the precision in estimates of sensitivity and specificity.
Conclusions: In a health-technology assessment setting, there is an increasing need to compare the efficiency of multiple diagnostic tests. Use of a bivariate network meta-analysis allows us to compare and rank all tests and thresholds of interest for healthcare policy and decision making.

18541

Harnessing the efficiencies of machine learning and Cochrane Crowd to identify randomised trials for individual Cochrane Reviews

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Background: Machine-learning and citizen-science initiatives within Cochrane are already transforming Cochrane's centralised efforts to identify reports of trials. The RCT machine classifier, which assigns a probability ranking to citations, can substantially reduce the screening workload while still retaining very high recall. In recent years, Cochrane Crowd collectively has identified many thousands of reports of trials. The challenge is to integrate

these new approaches into routine workflows for systematic reviews.
Objectives: To evaluate the performance (accuracy and workload reduction) of the RCT Machine Classifier + Cochrane Crowd versus standard screening approaches in a series of case studies of individual Cochrane Reviews; to identify practicalities of introducing Crowd +/- Machine as a service for reviewers.
Methods: Several evaluations are under way involving reviews from Cochrane Consumers and Communication; Cochrane Developmental, Psychosocial and Learning Problems; and Cochrane living systematic review pilots. As part of the evaluations, citations retrieved by searches are ranked by the RCT Classifier (with pre-specified probability thresholds applied) and filtered against citations already screened by the Crowd ('known assessments'). Previously unscreened citations are then sent to the Crowd for assessment. In parallel, the performance of Classifier + Crowd is compared to various combinations of manual screening.
Results: The pilots are ongoing. However, in one, 89% of citations retrieved from Embase were citations that had already been through Cochrane's Crowd-Machine systems and assigned relevant study-design classifications. In the other pilots where the Crowd is performing prospective screening for specific reviews, interim results show that Crowd can reduce the number of citations authors need to screen by as much as 80%, representing several thousands of citations, all within days of being sent to the Crowd.
Conclusions: Machine and crowd approaches have proven successful in improving efficiencies for centralised trial-searching activities and offer the prospect of similar efficiencies when implemented at the review level.

18832
Verification of the accuracy and completeness of disclosures of Conflict of Interest in the medical literature: a systematic survey

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Background: There is evidence that conflict of interest (COI) disclosures are not always accurate or complete. Reasons for incomplete or inaccurate disclosure include carelessness, missed detection, inappropriate assessment of potential risks, and intentional under-reporting.
Objectives: The first objective of this systematic survey is to assess the prevalence of inaccurate or incomplete COI disclosures in the medical literature as reported in studies done to date on this issue. The second objective is to summarise the methods that studies reported in their efforts to assess the accuracy and completeness of COI disclosures.
Methods: We will conduct a systematic survey to identify studies that either employed or discussed methods or conceptual approaches to verifying COI. We ran a systematic search of the following electronic databases: Medline and EMBASE. In addition, we searched for studies mentioning the following COI-related databases: Open Payments Data, Dollars for Docs, Association of the British Pharmaceutical Industry (UK database) and Danish Health and Medicines Authority. Reviewers will complete calibration exercises and will work in duplicate and independently on study selection and data extraction. For methodological studies, we will describe their general characteristics and findings in terms of completeness and accuracy. We will describe the methods described in discussion papers in narrative and/or tabular formats, as appropriate.
Results: Our search identified 8076 citations. The study-selection and data-extraction phases are ongoing and we will present results at the Summit.
Conclusions: Currently, there are no guidelines on when and how to verify COI disclosures. The ultimate aim is to develop a standardised methodology for the assessment of the accuracy and completeness of COI disclosures in the medical literature.

Long oral session 22: Meta-analysis methods B

18049

Adjusted analyses in studies addressing therapy and harm: A users' guide to the medical literature

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Background: Observational studies almost always suffer from bias because prognostic factors are unequally distributed between patients exposed or not to an intervention. The standard approach to deal with this problem is adjusted or stratified analysis. Its principle is to use measurement of risk factors to create prognostically homogeneous groups, and to combine effect estimates across groups. Objectives & Method: The purpose of this Users' Guide is to introduce clinicians and evidence users to fundamental concepts underlying adjustment as a way of dealing with prognostic imbalance, and the basic principles and relative trustworthiness of various adjustment strategies.
Results: Table 1 summarises the main approaches to address prognostic imbalance and their relative merits compared to randomised trials. One alternative to the standard approach is propensity analysis in which groups are matched according to the likelihood of membership in exposed or unexposed groups. Propensity methods can deal with multiple prognostic factors even if there are relatively few patients having outcome events. However, propensity methods do not address other limitations of traditional adjustment: investigators may not have measured all relevant prognostic factors (or not accurately) and unknown factors may bias the results. A second approach, instrumental variable analysis, relies on identifying a variable associated with the likelihood of receiving the intervention but that is not associated with any prognostic factor or with the outcome itself (other than through the intervention); this could mimic randomisation. Instruments can include regional variations in healthcare, or hospitals' or physicians' practice patterns. Unfortunately, as with assumptions of other adjustment approaches, it is never certain if an instrumental variable analysis ever meets these requirements.
Conclusions: Although all these approaches can reduce the risk of bias in observational studies, none replace the balance of both known and unknown prognostic factors offered by randomisation.

Attachments: Table 1_Agoritsas_UG.png

18554

A new tool to measure credibility of studies determining minimally important difference estimates

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Background: The ability to interpret results of patient-reported outcome measures (PROMs) and to judge the magnitude of effect (for instance, as large, moderate, small but still important, or negligible) is critical for their use in healthcare decision making. The most common reference point for PROMs' interpretation is the minimal important difference (MID), which provides a measure of the smallest change in a PROM that patients experience as important. Development of MIDs is ideally done by relating their results to an anchor measuring a similar

construct that is itself interpretable. Guidance on determining the credibility of MID estimates generated in this way remains to be developed. Objective: To develop a core instrument to measure the credibility of MID estimates from all relevant studies, and an extension with items that assess credibility when studies use a transition instrument as an anchor.
Methods: To inform the development of a new instrument addressing the credibility of empirically ascertained MIDs, we conducted a systematic survey summarising and appraising available methods to generate anchor-based MIDs. Iterative discussion among the team led to the development of the core credibility instrument. In a case study, we applied the core criteria and found the items insufficiently discriminatory when the anchor was a transition rating, and thus developed additional items for this context.
Results: The core instrument includes the following items: the anchor represents a patient rating and is interpretable to the patient and clinician; the precision around the estimate; and the correlation between the anchor and PROM. The extension includes the following items: the authors select a threshold on the anchor that reflects a small but important difference, the time elapsed between baseline and follow-up measurement for MID estimation is optimal, and correlation of the transition rating with the pre, post and change score in the PROM. Discussion: Our new instrument will allow users to determine the extent to which the design and conduct of studies measuring MIDs are likely to have protected against misleading estimates.

18922

Minimally important difference estimates and assessment of their credibility for patient-reported outcomes in adults: A systematic survey

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[9] Humber River Regional Hospital, Canada

Background: Patient-reported outcomes (PROs) capture patients' perspectives on treatment benefits and harms. Understanding PROs requires determining a level of improvement or deterioration that patients consider important. The most common reference point for interpretation of PROs is the minimal important difference (MID), which provides a measure of the smallest change in a PRO that patients perceive as an important benefit or harm. No inventory of MIDs is currently available. Thus, clinicians and patients have to navigate the vast literature in order to retrieve a specific MID. Even if they find an MID, there is no guidance to help them ascertain the trustworthiness of the apparently applicable MID.
Objectives: To create an inventory of published anchor-based MIDs associated with PROs used in evaluating the effects of interventions on chronic medical and psychiatric conditions in adults, including the context in which they were assessed (condition/disease), and the confidence users can place in a particular MID.
Methods: We searched MEDLINE, EMBASE, PsycINFO and CINAHL to identify studies addressing methods to estimate anchor-based MIDs of PROs or reporting empirical ascertainment of anchor-based MIDs. Teams of two reviewers independently screened citations, and identified and extracted relevant data. We collected information on study design, condition under assessment, population characteristics, characteristics of the PRO, and characteristics of the anchor. In addition, we created and applied a new tool to assess credibility of MID estimates. When multiple MIDs were reported for the same PRO across similar clinical conditions, we collected all these

estimates.
Results:A total of 5656 citations were retrieved for title and abstract screening of which 1716 were selected for full-text screening and 610 studies reporting on one or more MID estimates proved eligible. We will report on the spectrum and credibility of available MID estimates at the GES. Conclusion:Our inventory of available MIDs and their associated credibility will be of great use to clinical triallists, systematic review authors, patients and clinicians.

19359
Outcome choice and potential loss of valuable information - an example from a Cochrane Eyes and Vision systematic review

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Background: Outcomes selected for systematic reviews (SRs) should address clinical uncertainties to help make treatment decisions. However, when reviewers select outcomes by specifying the outcome's 5 elements (domain, measurement, method of aggregation, metric, and time point) these may not match outcomes reported in trials included in SRs.
Objectives: To examine from a selected Cochrane SR outcomes reported from eligible trials not meeting the review-outcome definition.
Methods: We selected a Cochrane SR comparing classes of medications given after cataract surgery, which had no trials contributing to meta-analyses of the primary outcome. Clinician authors of the SR defined the primary outcome as the proportion of participants with grade >1 on the Standardisation of Uveitis Nomenclature (SUN) scale at 1-week follow-up (dichotomous). The SUN scale ranges from 0-4 and indicates the amount of cells and flare in the anterior chamber of the eye; higher grades indicate worse inflammation. Cell and flare can be measured by a slit-lamp or a cell and flare meter, and are recorded as the number of cells, amount of flare, or a combination. We compared the number of studies providing inflammation data per the SR outcome definition with the number of studies providing inflammation data using other outcome definitions.
Results: Of 48 studies included in the SR, none reported dichotomous inflammation data. Eighteen studies reported inflammation as a continuous outcome; however, there was variation in outcome elements. Replacing the review outcomes with mean inflammation at 1-week follow-up, we were able to include data from 7 studies (n=484 participants) in meta-analysis. Extending follow-up to 1-month postoperatively would have added data from 4 more studies.
Conclusions: The choice to use a dichotomous rather than continuous outcome for inflammation scores resulted in a potential missed opportunity to use available data from trials. Additionally, dichotomization of continuous outcomes at arbitrary cut-points runs the risk of losing valuable information. Our results underscore the importance for core outcomes sets to address all 5 outcome elements.

Attachments: Table for Colloquium abstract 2017_final.pdf

Long oral session 23: Engaging with policy and practice

18986
Understanding the evidence-informed decision-making landscape in Africa: actors, engagement and skills

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Background: Evidence in various forms - whether it is primary research, evidence mapping, or evidence synthesis

products - needs to be perceived as useful in order to be used by decision makers. It is therefore important to understand how engagement occurs that facilitates research uptake; who the actors are that drive these processes; and, where the strengths and gaps lie.
Objectives: This presentation brings together findings from a series of 25 maps on the evidence-informed decision-making (EIDM) landscape(s) in Africa.
Methods: EIDM-landscape mapping, which, in this instance, was commissioned by the Africa Evidence Network, involves a graphic representation and description of the key stakeholders in the evidence and policy landscape in a particular environment, such as a country or sector. It maps the key role players in the production of research (e.g. universities, research councils and think tanks); role players in the use of research (e.g. government, NGOs, professional bodies); and intermediaries (e.g. knowledge brokers, donor organisations, networks). In addition, landscape maps attempt to represent the relationship and evidence flow between these actors by using arrows and other descriptive graphics.
Results: This landscape-map series is the first of its kind and follows on EIDM maps produced by the UJ-BCURE programme on South Africa and Malawi. The series is unique in its diversity and comprehensiveness and consists of maps from 10 different African countries as well as 2 maps that span more than one country. The maps furthermore cover a wide range of sectors such as health and the environment; as well as evidence use by particular groups (such as Parliamentarians in Uganda, Malawi and Tunisia). The presentation will also highlight which actors across these landscapes have evidence-synthesis capacity, drawing on a recent Africa-wide survey conducted by the Africa Evidence Network.
Conclusions: Understanding the EIDM landscape and identifying strengths and bottlenecks provides a basis for discussions on how to strengthen these formal and informal evidence-use systems and support the capacity of the actors who engage in it.

19122

Leveraging the research continuum with early, continuous, responsible engagement between policy makers and academia enhances HIV-prevention evidence uptake

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Background: The utilisation of research enhances the quality of policy discussions and potentially HIV policy outcomes (Datta & Jones, 2011). There are an increasing number of initiatives encouraging evidence use in HIV policy. However, evidence on the effectiveness of these approaches is unclear (Langer et al. 2016). Contextual cues, social norms and politics can be barriers to the uptake of evidence generated through operational research.
Objectives: EHPSA is a regional (ESA) HIV-prevention research programme for adolescents, LGBT and prisoners, with concurrent Evidence into Action (EiA) objectives. EHPSA's EiA approach works on evidence supply and demand simultaneously, by generating new evidence and stimulating early engagement to encourage robust debate.
Methods: EHPSA leverages the evidence process by systematically attaching various modalities to the research continuum; stakeholder-engagement plans (SEPs), technical fora (TF), regional symposia (RS), fellowships (FS) and knowledge management (KM). EHPSA's work on early, continuous, responsible engagement strengthens linkages and trust between academia and policymakers, improving the quality of HIV policy debates.
Results: • SEPs promote implementation of EiA activities across research stages, closing the gap between academic and policy spaces. • RS and TF promote evidence-informed decision making through common regional platforms for academics and policy influencers to interact face-to-face and debate evidence implications. • FS sustain a 'buddy' system between academics and policymakers. EHPSA built on existing relationships and responded flexibility to opportunities. The matching calibre of fellow and policymaker, attention to contextual matters and joint work on policy relevant matters in Swaziland contributed to the success.
Conclusions: The EHPSA approach ensures that evidence uptake does not only take place after peer review and publication. Early engagement and investment in stimulating debates increases the chances of evidence uptake once the body of research is disseminated into the policy and practice domain. EHPSA's approach is replicable but has to be resourced.

19185

Lessons learned from adopting an integrated approach to promote evidence-informed health policy making: A case experience from a middle-income country

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Background: Evidence-informed health policy making is an approach to policy decisions that is intended to ensure that decision making is well-informed by the best-available research evidence. This creates a need for an approach that links knowledge production to knowledge translation. The Center for Systematic Reviews of Health Policy and Systems Research (SPARK) and the Knowledge to Policy (K2P) Center were established at the American University of Beirut to promote evidence-informed health policies and action.
Objectives: The objective of this presentation is to reflect on the experiences of the two Centers and the lessons learned from promoting evidence-informed health policy making and action.
Methods: SPARK and K2P Centers have formed a unique collaboration to achieve the goal of impacting health policies. Whereas SPARK Center focuses on knowledge production, K2P Center focuses on knowledge translation and impact. The Centers follow an integrated approach that encompasses the following phases: 1) generation of research priority; 2) evidence synthesis; 3) knowledge translation; 4) knowledge uptake; and, 5) impact. The approach was applied to several case studies which led to health policy impact.
Results: In this presentation, we will reflect on our experiences in addressing diverse sets of topics, and the challenges and lessons learned from promoting evidence-informed health policies and action at the national and the Eastern Mediterranean Region levels. These include (but are not limited to) effective policy maker-researcher interactions; knowledge co-production; utilisation of different knowledge-translation tools and mechanisms at different levels of the decision-making process; institutionalisation efforts; and, provision of rapid-response services.
Conclusions: The model adopted by the Centers could be replicated in other contexts to help promote evidence-informed health policy making. The experiences and lessons learned could inform other groups, platforms, and networks including the Global Evidence Synthesis Initiative (GESI) Network to strengthen the application of an integrated and impactful knowledge-translation approach.

19337

From theory to demographic dividend road-maps: re-positioning population dynamics to the centre of development planning in sub-Saharan Africa

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Background: The African Union (AU) and its member states through the Assembly Decision (Assembly/AU/Dec.601 (XXVI) agreed to devote the AU theme for 2017 to 'Harnessing the Demographic Dividend through Investments in Youth'. This is a successful culmination of efforts by stakeholders in the development arena in Africa to re-position population to the centre of development planning and processes at the highest levels of decision making. We at the African Institute for Development Policy (AFIDEP), have been at the heart of these efforts.
Objectives: We document how alongside advocacy, we have approached evidence generation and synthesis on the potential of African countries to harness the demographic dividend to galvanise political commitment to integrating population dynamics as as a significant pillar for development planning.
Methods: We draw on our experience between 2013 and 2017 conducting studies, policy engagements and advocacy on the demographic dividend in 13 African countries; and, regional and international forums as case studies on how we can draw on various tools and strategies for successful engagements with policy and practice.

In particular, we utilise participant observation and critical reflections to document the ecosystem of evidence synthesis and uptake that has facilitated the traction that the demographic-dividend paradigm has gained among political leadership and decision makers in the quest for sustainable development.
Results: Our findings have enabled us develop a 4-stage conceptual toolkit (Figure 1) for practitioners to make evidence matter in decision making. We find that evidence-generation and scenario-modelling tools such as the DemDiv model and the National Transfer Accounts (NTA) methodology were crucial in the development of compelling communication and advocacy products on the demographic dividend that captured the imagination of decision makers in Africa to propel the paradigm to the top of the development agenda. Conclusion: A combination of evidence generation, synthesis and advocacy have been crucial in re-positioning population dynamics to the centre of development policy and action in Africa.

Attachments: DD 4 stage toolkit.JPG

Long oral session 24: Making recommendations for guidelines

18355
Certainty of net benefit: A concept between quality of evidence and strength of recommendation

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Background: The Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach to reporting quality of evidence and strength of recommendations appears discordant when the certainty in the balance of benefits and harms differs from the certainty of evidence for effect estimates.
Objectives: To frame conceptual development for defining Certainty of Net Benefit as a means to report the certainty that benefits outweigh harms.
Methods: Iterative refinement of ideas using input from workshops, presentations, and numerous large-group and small-group discussions.
Results: Certainty of net benefit is the confidence that the balance of benefits and harms is favourable. Determination of certainty of net benefit combines determination of certainty of effect estimates, importance of outcomes, and the combination of these concepts. Certainty of net harm is the confidence that the balance is unfavourable. Although the certainty of net benefit or harm may more closely align with the strength of recommendation, guideline panels may differ in direction or strength of recommendation when a favourable threshold is influenced by cost, acceptability, feasibility or equity.
Conclusions: Reporting the certainty of net benefit offers a way to express the certainty that benefits outweigh harms for a recommendation, and this can be an alternative way to characterise the trustworthiness of evidence supporting a recommendation.

18387
Discordant recommendations – Challenges in guideline synopses

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Background: Disease management programmes (DMPs) are structured treatment programmes for chronically ill patients. The German Institute for Quality and Efficiency in Health Care (IQWiG) prepares synopses of evidence-

based guidelines to identify relevant recommendations for DMPs; in this context, strong recommendations are particularly important. Guideline groups sometimes issue strong recommendations based on weak evidence ('discordant recommendations') if they regard their implementation to be important and wish to promote implementation. Analyses of guidelines of the Endocrine Society and the World Health Organization showed that about 35% of recommendations were discordant.
Objectives: To examine the frequency of discordant recommendations in evidence-based guidelines using the example of coronary heart disease (CHD) and to evaluate whether, in recent years, a trend in this frequency can be identified.
Methods: The analysis was based on 3 systematic searches for evidence-based guidelines conducted for 3 chronological guideline synopses on CHD. The guidelines were published between 1/2002-6/2007, 6/2007-9/2010, and 12/2011-12/2016. All recommendations and the corresponding Grade of Recommendation (GoR) and Level of Evidence (LoE) were extracted and checked for discordant recommendations. A quantitative descriptive analysis was performed.
Results: 21, 14 and 41 guidelines were included. The first synopsis (2007) included 816 recommendations, of which 61 (16%) were allocated to a high GoR in combination with a low LoE – 19 (31.1%) of these 61 were not supported by literature. The second synopsis (2010) included 403 recommendations, of which 48 (18%) were discordant – 16 (33.3%) of these 48 were not supported by literature. The discordant recommendations referred especially to diagnostics, coronary angiography, interventional and surgical coronary revascularisation and pharmacological therapy, but so far can only be identified by evaluating GoR and LoE. The analyses for the third synopsis (2016) are ongoing.
Conclusions: Discordant recommendations also exist in guideline synopses on CHD. To assess them they should be easy to identify and explained.

18450
Best-practice statements in public-health guidelines

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Background: Best-practice statements (BPS) may be provided in guidelines in lieu of evidence-based recommendations when there is a high level of certainty that the benefits of the recommended intervention outweigh the harms. However, BPS are not clearly defined and terminology is inconsistent, leading to both overuse (an evidence review and standard recommendation should have been developed) and underuse (performing unnecessary evidence reviews).
Objectives: To describe BPS in World Health Organization (WHO) guidelines and to propose a new definition and typology for BPS.
Methods: All guidelines approved by the WHO Guidelines Review Committee and published from 2012 to 2016 were reviewed. We included discrete statements issued by guideline expert panels that were not based on a review of evidence. We extracted the characteristics of these statements and synthesised data using descriptive statistics. An iterative, consensus-based process was used to formulate definitions and a typology for BPS based on this cohort of guidelines.
Results: Of 86 guidelines, 31 contained BPS. These statements were variably labelled and presented, and the process by which they were developed and their rationale were often poorly reported. Several discrete types of BPS emerged, including those based on: 1) human rights and ethics principles and conventions; 2) indirect evidence based on physics or other principles; 3) indirect evidence based on established clinical principles; 4) the need to collect information; and, 5) other reasons where the BPS does not reasonably require the systematic collection of evidence.
Conclusions: This work may help guideline developers consider different types of BPS and to avoid their inappropriate use. The typology needs to be tested in different guideline cohorts for reliability and utility, and as a tool in the development of future guidelines.

18951

Using evidence to make decisions in guideline development: The Evidence to Decision Framework (EtD)

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Background: Experiences with decision makers often reveal that there are certain criteria that are used to make decisions. However, decision makers may omit important criteria or not use the best-available evidence in the decision-making process, whether making clinical and public health recommendations (in guidelines), or coverage decisions.
Objectives: To develop and evaluate a tool to facilitate the use of evidence in decision making for guideline development.
Methods: The Evidence to Decision (EtD) Framework was developed through the work of the GRADE Working Group in the DECIDE project (Developing and Evaluating Communication Strategies to Support Informed Decisions and Practice Based on Evidence). It was tested in a series of 15 guideline panels to develop guidelines about treatments and for screening tests. Feedback was provided by methodologists and responses were summarised and interpreted using pre-specified domains and applied to revise the EtD framework. The framework continues to be used and refined.
Results: A tool for guideline developers and users to present evidence about criteria important to decision making and to use evidence to make recommendations was developed and revised. Feedback from methodologists was generally positive and indicates that the framework helps to structure the process of making decisions by asking groups to carefully consider the criteria systematically and transparently record the process. The EtD Framework includes criteria covering evidence for benefits and harms, patient values and preferences, costs and resources, acceptability, equity issues and feasibility. EtDs have been developed for decisions about treatments and tests, and for clinical, public health and coverage decisions.
Conclusions: The EtD has been used with guideline groups to make recommendations and was revised according to feedback. The EtD is available as an interactive version and available for use and presentation in the GRADEpro online software. It is also used to produce recommendations in a format for clinicians and patients, and in Apps for use at the point of care.

Long oral session 25: Tools for evidence production and synthesis

18845

RobotReviewer: a tool for automating evidence synthesis — development and evaluation to date, and future plans

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Background: The exponential growth of biomedical literature has greatly increased the burden on those producing systematic reviews and guidelines, thus hindering our ability to practice evidence-based medicine. To meet these demands, we need new computational tools and methods to expedite evidence synthesis.
Objectives: RobotReviewer aims to automate, or semi-automate the task of data extraction for evidence synthesis. The system extracts (an increasing number of) key variables from full-text articles (PDFs) describing the conduct and results of randomised-controlled trials (RCTs).

Methods: RobotReviewer incorporates a number of novel machine-learning (ML) models, which have been trained on large annotated datasets (currently including the Cochrane Database of Systematic Reviews, and the Cochrane Crowd EMBASE set). The web tool takes a set of RCTs as input, and produces a downloadable summary report (see Figure). The tool incorporates a PDF viewer to allow the user to see and interact with extracted text in context.
Results: Currently, RobotReviewer can: (1) describe the study design (e.g. RCT or not); (2) identify sentences that describe the trial population, interventions/comparators and outcomes; and, (3) assess biases using the Cochrane Risk-of-Bias tool (both judging whether at low or high/unclear risk of bias, and identifying text justifying the judgment). In future, we aim to continue to improve upon individual task accuracy, and extend the system to extract the full range of variables needed for evidence synthesis. We have released the software and trained ML models as open source (under the GPL v3.0 license) on our project website (http://www.robotreviewer.net/) together with a live demonstration. RobotReviewer also features a REST API, which enables the underlying annotation models to be incorporated into other software systems.
Conclusions: RobotReviewer represents a step toward more efficient evidence synthesis via automation. Adopting such technologies is critical if future evidence syntheses are to remain timely and comprehensive.

Attachments: robot-reviewer-big-pic.pdf

18887
Better reporting of health equity in randomised trials: CONSORT-Equity 2017

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Background: Health equity concerns the absence of differences in health that are avoidable by reasonable action. Randomised trials have the potential to assess effects on health equity by either: 1) evaluating an intervention focused on people experiencing social disadvantage, or 2) exploring the difference in the effect of the intervention between two groups or as a gradient across more than two groups experiencing different levels of social disadvantage. Randomised trials have been found to rarely report information that may be used to inform decisions about health equity. The CONSORT (Consolidated Standards of Reporting Trials) reporting guideline and its extensions do not address this gap.
Objectives: We aimed to develop an evidence and consensus-based reporting guideline to improve reporting of health equity in randomised trials.
Methods: The research team and advisory board were representative of potential users from low- and middle-income countries, including knowledge users and methodologists. Empirical evidence was collected using 4 methods: 1) Assessing CONSORT and its extensions; 2) Assessing 200 health equity relevant trials; 3) conducting key informant interviews; and, 4) reviewing other related guidance. An online survey was used to gather broad input from a range of users (n=168) and a consensus meeting of global opinion leaders representing potential users and methodologist communities (The Boston Equity Symposium consensus panel) was held to discuss in depth the importance of each CONSORT item until consensus was reached.
Results: We reached agreement on extensions for 16 of the standard CONSORT items and the inclusion of one new item on ethics. Examples of good reporting for each item were identified to provide an explanation for each item.
Conclusions: This CONSORT-Equity 2017 reporting guideline will benefit peer reviewers, researchers, journal editors and other stakeholders by providing standards for improving the reporting of health equity in randomised

trial. Ultimately, uptake of CONSORT-Equity 2017 will make it easier for decision makers to find and use evidence from randomised trials to reduce unfair inequalities in health.

18934

Data Abstraction Assistant (DAA) – What can it do and does it work?

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Background: During systematic reviews, data abstraction can be inefficient and error-prone. We developed Data Abstraction Assistant (DAA), an open-access, open-source tool to help data abstractors mark sources of information by dropping 'flags' in articles (Figure). DAA is currently implemented in the Systematic Review Data Repository (SRDR), but is compatible across data systems. Using a randomised trial, we are evaluating the accuracy and efficiency of data abstraction comparing DAA with traditional approaches.
Objectives: To present opinions of users of the DAA tool (DAA Trial participants) regarding the user-friendliness of the tool, and to present preliminary results from the trial.
Methods: There are 52 participants in the DAA Trial. We formed 26 pairs of individuals, each pair comprising one less-experienced and one more-experienced abstractor. After data abstraction for the trial, we surveyed each abstractor using Qualtrics®.
Results: The 40 abstractors who had completed the DAA Trial as of 14 March 2017 completed the survey. 33/40 abstractors (83%) found using DAA to be either very or somewhat easy overall. When asked about future use during data abstraction, 30/40 abstractors (75%) said they are very or somewhat likely to use it themselves, and 24/40 (60%) stated that they are very or somewhat likely to recommend that others use it. When asked about their favourite DAA feature, 21/40 abstractors (52%) named the ability to click on flags marking information sources (Figure). At the Summit, we will present DAA Trial data pertaining to the possible effectiveness of DAA in improving the accuracy and efficiency of the data-abstraction process.
Conclusions: Most users found the DAA tool user-friendly, and most would use it and recommend that others use it for data abstraction in the future. The most popular feature of DAA appears to be the ability to click on existing flags to navigate to portions of text/figures/tables in the article that contain relevant data, a feature that could be useful when verifying abstracted data and during updates of systematic reviews. DAA was released for public use in April 2017.

Attachments: Figure.pdf

19013

PROBAST – A risk-of-bias tool for prediction-modelling studies

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Background: Quality assessment of included studies is a crucial step in any systematic review (SR). Review and synthesis of prediction-modelling studies is an evolving area and a tool facilitating quality assessment for

prognostic and diagnostic prediction-modelling studies is needed.
Objectives: To introduce PROBAST, a tool for assessing the risk of bias and applicability of prediction-modelling studies in a SR.
Methods: A Delphi process, involving 42 experts in the field of prediction research, was used until agreement on the content of the final tool was reached. Existing initiatives in the field of prediction research such as the REMARK and TRIPOD reporting guidelines formed part of the evidence base for the tool development. The scope of PROBAST was determined with consideration of existing tools, such as QUIPS and QUADAS 2.
Results: After six rounds of the Delphi procedure, a final tool was developed which utilises a domain-based structure supported by signalling questions similar to QUADAS 2. PROBAST assesses the risk of bias and applicability of prediction-modelling studies. Risk of bias refers to any flaw or shortcoming in the design, conduct or analysis of a primary study that is likely to distort the predictive performance of a model. The predictive performance is typically evaluated using calibration, discrimination and sometimes classification measures. Assessment of applicability examines whether the prediction-model development or validation study matches the systematic review question in terms of the target population, predictors or outcomes of interest. PROBAST comprises four domains (Participant selection; Predictors; Outcome; Analysis) and 23 signalling questions grouped within these domains.
Conclusions: PROBAST can be used to assess the quality of prediction-modelling studies included in a SR. The presentation will give an overview of the development process and introduce the final tool.

Short oral presentations

Short oral session 1: Improving conduct and reporting of evidence synthesis

18063

Overlapping of trials and systematic reviews between LILACS and PubMed

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Background: The tevel of overlapping of trials and systematic reviews (SRs) between LILACS and PubMed is uncertain.
Objectives: To analyse the level of overlapping of trials and SRs published in the last 10 years in LILACS and PubMed.
Methods: We performed a search in January 2017 on PubMed and LILACS to identify SRs and trials published between 2006 and 2015. Later years were excluded due to incomplete indexation. The search terms in both databases were selected in order to favour their comparability (Box 1). We analysed trends of SRs and trials through a regression analysis performed in Stata® 14.1.
Results: In the last 10 years, excluding duplications, both databases presented a statistically significant upward trend of SRs and trial publications: +2225 yearly (IC95% 2104 to 2946; p< 0.0001) +1751 yearly (IC95% 1069 to 2433; p< 0.0001) respectively. The search retrieved 530 494 unique trials in both databases, 1578 of which were indexed in both databases (overlapping of 0.30%); and 146 578 unique SRs, 1278 of them in both databases (overlapping of 0.87%) (Table 1). The overlapping was 49.47% and 26.32% of trials and SRs identified considering only in LILACS respectively, and 0.30% and 0.89% only in PubMed. There are 176 and 550 LILACS journals, not indexed in PubMed, reporting trials and SRs respectively. There was a statistically significant downward trend in the proportion of SRS indexed only in LILACS, despite a statistically significant increase in the absolute number of SRs (Fig.1a); and there was no important change in the trend of trial indexing (Fig.1b).
Conclusions: There is a low level of overlapping between LILACS and PubMed. Although the absolute number of studies published in LILACS is much lower than PubMed, there are still a non-marginal number of trials and SRs outside PubMed deserving attention. The number of trials seems stable over time but SRs are growing.

Attachments: Box 1. Table 1.jpg, Fig. 1.jpg

18143

The challenge of assessing quality and synthesising evidence: Lessons from an overview of systematic reviews of economic evaluations of vaccination programmes

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Background: Although there are a large number of published systematic reviews (SRs) of economic evaluations (EEs) of vaccination programs used to support policy decision making, the overall summary of findings from these SRs lacks of consensus, and the overall quality of these SRs has not been critically appraised.
Objectives: To assess methodological quality of SRs and summarize overall findings of EEs of each vaccination.
Methods: We searched PubMed, Embase, Cochrane library, Scopus, Web of science and PsycInfo from inception to 31 May 2017. No language restriction was applied. We extracted information on general information, search

strategies, inclusion criteria, data extraction, study characteristics, and overall summary of the findings of SRs. We assessed quality of SRs using ROBIS.
Results: A total of 89 SRs of EEs of vaccination programs was identified. Most studies (83%, 74/89) focused on the evaluation of single vaccine (either monovalent or combined vaccine), while 15 studies (17%) included several vaccines into their analysis. Reviews were mostly on HPV (20%, 18/89), followed by influenza (17%, 15/89), and pneumococcal vaccines (12%, 11/89). Overall findings showed that some vaccination programs (e.g. dengue, chickenpox, herpes zoster, hepatitis B) were cost-effective in general, while some (e.g. pneumococcal, rotavirus, hepatitis A) provided inconsistent conclusions, depended on vaccine prices, vaccine efficacy, duration of protection, discount rate, incidence of the disease or inclusion of herd immunity in the analysis. Half of the SRs (51%, 45/89) did not mention the quality assessment of EEs included. Among those reporting quality assessment, we found a variation of tools used.
Conclusions: Our findings suggest a wide variation of reporting methods of SRs of EEs. Standardization of these reporting methods may be needed. The overall summary of findings from SRs shows that some vaccinations are generally cost-effective, but in some vaccinations, the absolute consistent conclusions cannot be drawn.

18157
Database search of trial registries to identify unpublished data for cancer-related systematic reviews

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Background: As of September of 2005, all prospective trials need to be registered in a public trial registry at the beginning or before the onset of participant enrollment, as defined by the International Committee of Medical Journal Editors (ICMJE). Trial registries therefore serve as an excellent resource for identifying ongoing trials with evidence of completing yet unpublished trials suggesting potential publication bias. Thus trial registries, as recommended by the PRISMA checklist, should be searched for the detection of missing data to ensure a complete evidence body.
Methods: Based on a written a priori protocol we performed a comprehensive search in MEDLINE for systematic reviews (SRs) published in 10 high-impact, general medical journals (e.g. Journal of the National Cancer Institute, Journal of Clinical Oncology, NEJM, Lancet, BMJ, etc.) over a 5-year period (2012/01- 2016/12). In addition, we identified all cancer-related Cochrane reviews from the same period using the Cancer filter in the Cochrane Database of Systematic Reviews (CDSR). Two review authors extracted relevant data in duplicate and independently.
Results: We identified 178 high-impact SRs and 356 Cochrane reviews, which met our inclusion criteria. The majority of these addressed topics related to cancer in general (25.8%). Overall, the percentage of systematic reviews using trial registries to identify unpublished, ongoing or completed trials was 52.6% (281 of 534 reviews). Out of 356 Cochrane reviews, 72.9% (266 of 356 reviews) used trial registries, while the percentage of high-impact SRs using trial registries was 8.4% (15 of 178 reviews). 50% (268 of 534) of SRs using non-IPD data used trial registries, while 10.2% (6 of 59) IPD-data SRs conducted trial registry searches.
Conclusions: This study suggests that the majority of SRs published in high-impact journals do not include trial registries in their search strategies; this is in contrast to reviews published in the Cochrane Library where this is common practice. In light of the tremendous value of trial registries to reduce the risk of publication bias, it appears critically important to raise awareness of this issue.

18206
A proposed framework for developing quality-assessment tools

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Background: Quality assessment of included studies is a crucial step when preparing systematic reviews. Although it is possible for reviewers to simply assess what they consider to be key components of risk of bias (ROB), this may result in important sources of bias being omitted, inappropriate items included or too much emphasis being given to particular items guided by reviewers' subjective opinions. In contrast, a structured tool provides a convenient, standardised way to assess ROB providing consistency across reviews.
Objectives: To develop a framework for developing quality-assessment (QA) tools.
Methods: Based on our experiences of developing a variety of QA tools for studies of differing designs over the last 14 years, we have developed a suggested framework for developing QA tools.
Results: The framework consists of a three stages - (1) initial steps; (2) tool development; and, (3) dissemination. Each stage includes defined steps, which we consider important to follow when developing a tool. However, there is some flexibility on how these steps may be approached. In developing this framework we have drawn on our extensive experience of developing a number of QA tools including QUADAS-2 for diagnostic accuracy studies; ROBIS for systematic reviews; PROBAST for prediction modelling studies; ROBINS-I for non-randomised studies of interventions; and, the new version of the Cochrane risk-of-bias tool for randomised trials (RoB 2.0). Despite having used different approaches to the development of each of these tools, we found that all approaches shared common features and processes. This led to the development of this framework.
Conclusions: We recommend that anyone who would like to develop a new QA tool follow the stages outlined in this paper. We hope that our proposed framework will increase the number of tools developed using robust methods.

18491

Assessment of reporting of evidence-based healthcare (EBHC) e-learning interventions in included studies of a Campbell systematic review

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Background: We conducted a Campbell review on e-learning of evidence-based healthcare (EBHC) to increase EBHC competencies in healthcare professionals. Data were extracted based on our logic model and included details of the intervention, educational context and implementation.
Objectives: To assess reporting of EBHC e-learning interventions for studies included in our review using the guideline for reporting evidence-based practice educational interventions and teaching (GREET).
Methods: The GREET checklist comprises 17 items recommended for transparent reporting of EBHC educational interventions. Two authors independently assessed reporting of EBHC e-learning interventions for each of the included studies. We made judgements on adequate reporting for each GREET item (yes/no/unclear) and provided justifications. Discrepancies were resolved through discussions and consultations with a third author. We entered data into Excel and analysed results descriptively.
Results: Of the 24 included studies, 96% provided a brief description of the educational intervention; 29% mentioned a theory; 38% described the learning objectives; 92% listed the EBHC content; 58% adequately specified learning materials; 88% described educational strategies; 25% reported incentives; 17% provided details on instructors; 71% adequately reported on delivery of the intervention; 46% reported learning environments; 67% described the schedule; 63% specified the time spent; 21% reported planned, but 0% reported unplanned changes to the intervention; 13% reported learners' attendance; 4% included a process to determine whether materials and strategies were delivered as planned; and, 0% described whether the intervention was delivered as

scheduled. None of the included studies adequately reported on all items.
Conclusions: Our assessment of reporting of EBHC e-learning interventions revealed that included studies did not follow the GREET format. Transparent, comprehensive reporting of interventions is important to those considering the use of research on these interventions as well as for the conduct of evidence synthesis.

18739
Primer in systematic reviews: enhancing capacity to find, appraise, interpret and use systematic reviews

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Health staff need help to find, appraise, interpret and apply findings from systematic reviews in topics that they understand and are important to them. We developed a generic course to increase the capacity of researchers, practitioners and policy makers to use systematic reviews. We implemented and evaluated the course in various settings tailored to the specific needs of participants.
Methods: The Primer in Systematic Review course is offered as a face:face (4 days using interactive methods) or a purely online 6-week course dually accredited at the University of Stellenbosch and the Liverpool School of Tropical Medicine. Practical examples and systematic reviews were tailored to specific groups of participants. The online course consists of presentations, practical examples, links to relevant resources, exercises and self-assessments. For both formats, participants engaged with each other and facilitators, before, during and after the course.
Results: During the last 5 years, we have offered the face:face course in various settings. Firstly in Tanzania (2012) for malaria researchers at Ifakara Research Centre. Subsequent course participants included, among others, TB specialists in Chennai (2015); neglected tropical diseases policy and programme staff in Ghana and Cameroon (2016/7); and, public health policy specialists working for the Department for International Development in the UK (2017). Participants enjoyed the interactive nature, relevant examples, blended-teaching approach, and called for expansion of the workshop to reach a wider audience. For many, it was the first time they had read a systematic review. Benefits included learning at the participants' own pace and in a place convenient to them. Participants liked the self-assessment, variation in activities and resources while challenges included slow internet speeds and limited assessments. Conclusion: We have successfully implemented face:face and online Primer in Systematic Review courses. Through pragmatic, interactive approaches, we are enhancing researchers', clinicians' and public health policy makers' capacity to find, appraise, interpret and use systematic reviews.

18849
The effectiveness of budget support – a synthesis study

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Background: Budget support became increasingly popular towards the second half of the 2000s as the most consequential aid instrument for implementing the principles of effective aid formulated in the 2005 Paris Declaration. Although evaluations found that budget support contributed to improved development outcomes in several countries, the instrument has come under criticism in recent years and many bilateral donors have partly or fully stopped using it.
Objectives: The synthesis on the effectiveness of budget support aims at making lessons learnt from implementing, ending and evaluating budget support available to decision makers in the current aid environment

where related financing instruments are used, e.g. for achieving the SDGs and combatting climate change.
Methods: The synthesis follows a systematic-review process as defined by the Campbell Collaboration as closely as possible. Since for the field of budget support, counterfactual-based impact evaluations are not available, the evaluation team took a qualitative approach to conduct the synthesis, thus contributing to the debate on how to transfer systematic-review standards to qualitative, complex and methodological versatile areas of research and evaluation.
Results: The synthesis finds convincingly broad evidence that budget support is indeed an effective instrument to promote important developmental outcomes, such as improvements in public financial management, budget processes, and provision of public goods and services. Yet, not only the political debate on budget support largely ignored solid empirical evidence on the effectiveness of the instrument; in hindsight, most empirical work on the aid modality equally turned a blind eye on politically disputed aspects of budget support, namely the risks and unintended effects.
Conclusions: With key elements of the instrument's intervention logic severely under-researched, future empirical work should focus more clearly on potential risks of budget support, on the effects and causal mechanisms of specific inputs and on the consequences of donor withdrawal.

Attachments: Abstract_Global Evidence Summit_Orth_Krisch.pdf

18932
Audit of the use of clinical trial registries in Cochrane Intervention Reviews – preliminary results

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Background: Clinical trial registries were established with a general aim of reducing publication bias. Searching trial registries as part of the search process for Cochrane reviews has been mandatory since 2013. There is growing interest in how clinical trial registration status and trial registry data impacts on systematic review findings. The extent of trial registry information use in Cochrane reviews is not well established.
Objectives: To audit how clinical trial registries of various types and associated subject-specific registers are currently used in Cochrane intervention reviews.
Methods: We selected the 5 most recently published intervention reviews or review updates from 52 Cochrane Review Groups (search date: 1 February 2017). A single assessor extracted data from each review on the frequency of: i) trial registry searching; ii) reporting results of trial registry searches; and, iii) use of information obtained from trial registries in the review (e.g. for risk-of-bias or GRADE assessment, and planning review updates).
Results: Preliminary results from 60 reviews (12 CRGs) showed that 90% (54/60) included a search of at least one major registry or portal (ClinicalTrials.gov, WHO ICTRP). The number of records retrieved from trial registries was reported in 26% of reviews. Information obtained from clinical trial registries was used in 65% (39/60) of reviews - most frequently for risk-of-bias assessment with 20% (12/60) of reviews using trial registry data when judging reporting bias. In 18% (11/60) of reviews, the Discussion section included mentions of trial registry information in Potential Biases in the Review Process and Implications for Practice or Research. Twelve per cent (7/60) of reviews used the phrase 'No ongoing studies were identified' if trial registry searches did not retrieve any eligible ongoing studies.
Conclusions: The majority of audited reviews used trial registry data in some way. Based on these preliminary results, trial registries are being routinely searched in Cochrane reviews, but guidance should be established to assist review teams to make use of information obtained from searching these sources.

19022
Identifying commonly used terms in systematic reviews of implementation in healthcare

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Background: In recent years there has been a rapid growth in the amount of implementation research being carried out and published. Locating studies of implementation research in healthcare is challenging: there is large variation in terminology amongst authors and implementation experts, and there is often disagreement about what constitutes an implementation study. These factors lead to confusion and uncertainty about what terms should be included in a database search strategy. Previous work measured the sensitivity of specific terms for implementation across three reviews of implementation (in care homes, in dementia, and a review of reviews in healthcare). The evidence suggested that terms for methods of implementing change (e.g. experts, audit and feedback, educational workshops) retrieved more relevant records than terms describing the process (e.g. 'bench to bedside', 'knowledge mobilisation' and 'knowledge translation').
Objectives: The aim of this study was to test the terms found to have the best sensitivity in previous work against systematic review abstracts retrieved from the Canadian Agency for Drugs and Technology in Health (CADTH) Rx for Change database
Methods: Systematic reviews held on the CADTH Rx for Change database were selected by quality rating and checked for inclusion on MEDLINE. Search terms and phrases for implementation identified were searched in the title and abstract fields of the systematic reviews on MEDLINE. Sensitivity of the terms was examined and compared with previous results.
Results: There were 932 systematic reviews included on the CADTH Rx for Change database categorised by professional, organisational, consumer, financial and regulatory interventions. There were 189 systematic reviews with an AMSTAR rating of 9-11, which formed the test set. Analysis of the title and abstracts indicated that some search terms and medical subject headings were more effective than others in retrieving systematic reviews in implementation.
Conclusions: The findings will aid researchers and information specialists designing searches to retrieve implementation studies.

Short oral session 2: Considerations for meta-analyses

18002

A novel method for modelling interactions between the components of complex interventions in networks of randomised trials

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Background: Complex interventions consist of multiple interacting components whose effect on the outcome is not easily discernible. Therefore, such interventions may be better investigated within a network of trials that allows sharing information across studies. Several models have been suggested for the analysis of complex interventions in network meta-analysis (NMA). Lumping interventions may result in increased heterogeneity whereas splitting leads to lack of precision and ignores the sharing components across interventions. Other approaches assume additivity of effects of components or regress one component on the other.
Objectives: To present a new, more pragmatic, method for disentangling the effects of components in NMAs of complex interventions.
Methods: We borrow methodology from mediation analysis to model the pathway leading from one component to the outcome both directly and via its combination with other components. In this way, we allow the effect of each component to differ depending on the combinations in which it appears. Unlike previous approaches that assume interaction between two components at a time, our model aims to identify causal relationships among all

components simultaneously. We illustrate our method using a NMA of psychological interventions for heart coronary disease. The dataset involves 36 studies measuring all-cause mortality.
Results: We found that no component has an important benefit compared to usual care but the addition of behavioural and relaxation components on the top of educational improves the performance of the latter significantly. Our model suggested that the assumption of additivity on the effects of components might not be plausible. The difference between the sum of the effects of the aforementioned components and the effect of their combinations was 0.81 (-1.26,3.79).
Conclusions: NMAs of complex interventions should try to answer two questions: a) which components work and, b) how do they work. Our approach targets at both questions. Finding a reasonable pathway across components, though, is often challenging and clinical input from experts in the field is necessary.

18096
A checklist for the assessment of published indirect comparisons and network meta-analyses

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Background: Systematic reviews provide an overview of the available studies on a certain topic. By means of meta-analyses pooled-effect estimates can be calculated if the considered data are sufficiently homogenous. Besides traditional meta-analyses, in which direct head-to-head studies comparing 2 interventions are summarised, indirect comparisons and network meta-analyses are increasingly used.
Objectives: To describe and discuss a checklist for the assessment of published indirect comparisons and network meta-analyses.
Methods: Existing approaches for indirect comparisons and network meta-analyses are presented and explained. The main assumptions and requirements of these methods are described. A checklist for the assessment of published indirect comparisons and network meta-analyses is suggested. By means of examples, different types of indirect comparisons and network meta-analyses are described and the application of the checklist is explained.
Results: Within the framework of systematic reviews indirect comparisons and network meta-analyses enable the estimation of effects without corresponding direct head-to-head studies as well as the simultaneous analysis of networks containing more than 2 interventions. The adequate application of these methods requires strong assumptions. Transparent and detailed documentation is essential for an adequate assessment of published results from indirect comparisons and network meta-analyses.
Conclusions: Indirect comparisons and network meta-analyses represent an important advancement of traditional meta-analyses. However, the underlying assumptions and requirements have to be acknowledged.

18277
Univariable meta-regression may be more conservative compared to chi-square in sub-group analyses

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Univariable meta-regression may be more conservative compared to chi-square in sub-group analyses.
Background: Authors of systematic reviews exploring heterogeneity typically use the chi-square test, the default statistical method for sub-group analysis in most statistical packages. Another analytical method to assess effect modification or heterogeneity of both binary and continuous variables is meta-regression.
Objectives: To explore the extent to which chi-square and meta-regression provide different results for subgroup analysis.

Methods: We present our experience with applying both the chi-square method and a random-effects univariable meta-regression to a recent subgroup analysis in a prognostic review on deterioration of transcatheter aortic valve implants. For this analysis, we used the DerSimonian and Laired random effect model with a Freeman-Tukey transformation. R (version 3.3.2) provided the statistical package for our analyses.
Results: The pooled incidence rate of valve deterioration from 13 observational studies was 28 (95% CI: 2 to 73) per 10 000 patient years. We observed a higher incidence rate in the subgroup of studies with no anti-coagulation at discharge (126, 95% CI: 97 to 160, I2 = 0%) than in the subgroup of studies not reporting on anticoagulation (14, 95% CI: 0.2 to 40, I2 = 87%). The chi-square test showed an interaction p-value of <0.0001 whereas the meta-regression showed a p-value of 0.01. We hypothesise this difference may occur when there is high heterogeneity within the sub-group(s). To test this, we are now identifying a sample of Cochrane reviews published in 2016 that reported a subgroup analysis with a chi-square p<0.1. We will repeat the subgroup analyses using meta-regression. We will present the results at the Summit and compare the results.
Conclusions: Utilisation of meta-regression for test of sub-group effect in one instance provided a more conservative p-value compared to the chi-square test. It would be useful to determine if this is an isolated instance or a generalisable phenomenon and, if so, explain the difference.

18546

The importance of minimal important differences to inform systematic reviews and clinical practice guidelines: an example

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Background: Investigators increasingly rely on patient-reported outcome measures (PROMs) as key end points in clinical trials. However, interpretation of the magnitude of treatment effects on PROMs presents challenges. The smallest change that patients perceive as important – the minimal important difference (MID) – can enhance the interpretation of PROMs. We present an example in which we identified credible MIDs to facilitate understanding of the importance of intervention effects in a meta-analysis.
Objectives: To identify credible anchor-based MIDs for the PROMs used in trials comparing arthroscopic surgery to conservative management; describe our approach to gathering and interpreting the credibility of MID estimates; and, show how our results informed the linked systematic review (SR) and subsequent development of the BMJ Rapid Recommendation (RapidRec).
Methods: We searched MEDLINE, EMBASE and PsycINFO for studies documenting the development of anchor-based MIDs for PROMs reported in trials included in the linked SR and judged by the parallel BMJ RapidRec panel as critically important for informing their guideline: measures of pain, function and health-related quality of life. We assessed the credibility of MIDs by focusing on the correlation between change in the PROM under consideration and the anchor. The SR and guideline authors used the credible MIDs for each PROM to interpret their results.
Results: We were able to distinguish between more and less trustworthy MIDs and provide best estimates for key instruments that informed evidence presentation in the associated meta-analysis of treatment effects, and judgments by the BMJ RapidRec panel. Using the MIDs, the panel judged that arthroscopy had only a trivial-to-very small impact on short-term knee pain and function. The MIDs allowed the panel to weigh the magnitude of benefit against the harms of arthroscopy. In doing so, the panel was confident making a strong recommendation against knee arthroscopy.
Conclusions: Our study provides a model for applying the MID concept to aid in the interpretation of evidence, and the formulation of recommendations for clinical practice guidelines.

18550

MetaPROM – Enhancing the interpretation of Meta-analyses of Patient-Reported Outcome Measures through a Microsoft Excel-based statistical software program

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Background: Interpretation of the magnitude of treatment effects for most continuous outcomes and, particularly for patient-reported outcome measures (PROMs), presents challenges. Having decided which PROMs to include in a meta-analysis, review authors must ensure the results they present are optimally interpretable to their target audiences. RevMan is currently limited to two presentation formats when performing meta-analysis of PROM data (i.e. mean difference (MD) and standardised mean difference (SMD)). Although statistical software such as Stata and R offer packages to perform meta-analysis with greater flexibility, allowing investigators to compute pooled estimates using alternative presentation formats that may enhance interpretability, these software can be complex for the average systematic reviewer, as they require programming and advanced statistical knowledge.
Objectives: To summarise available presentation approaches embedded within a novel Microsoft Excel-based tool for enhancing the interpretability of pooled estimates of PROMs.
Methods: MetaPROM performs fixed and random effects meta-analysis for continuous PROM data, and is particularly useful when the included trials report results using different PROMs. MetaPROM facilitates the use of a series of common and emerging statistical presentation formats including SMD, MD in natural units of the most familiar instrument, MD in MID units, ratio of means, relative risk, odds ratio, risk difference and the number needed to treat.
Results: We illustrate the application of these approaches in meta-analysis of PROM data with an example using data from a systematic review of paroxetine vs. placebo for the treatment of major depression. We discuss the relative merits and limitations of each alternative and offer guidance for meta-analysts and guideline developers.
Conclusions: MetaPROM offers various presentation approaches to enhance interpretability of pooled estimates of PROMs using flexible, user-friendly, and soon to be widely available software.

18620

Network meta-analysis of complex interventions: accounting for component effects and control group risk

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Background: In many medical areas treatment interventions consist of multiple components. In 2009 Welton et al. (1) proposed 4 increasingly complex network meta-analysis models for assessing component effects of complex interventions. The additive-effects model allows a separate effect for each component. The two-way interaction model extends this to allow pairs of interventions to have bigger or smaller effects than would be expected from their individual components.
Objectives: To apply the additive-effects and two-way interaction models to an existing Cochrane review of psychological preparation interventions for adults undergoing surgery (2) and extend the models to account for control-group risk (CGR) for the continuous outcome length of stay (LOS). By doing this it is hoped that the most-effective components, and combinations of components, of the interventions can be identified.
Methods: We used a network of 36 trials comparing combinations of 6 components for psychological intervention before surgery. CGR was accounted for by allowing component effects to vary across different values of control-

group LOS. Models were fitted within a Bayesian framework using WinBUGS and accounting for measurement error in CGR.
Results: Clinical and statistical heterogeneity were identified in the network. CGR was an important factor in determining the effectiveness of interventions. Specific component effects by comparison only explained a small fraction of the between-study heterogeneity.
Conclusions: We extended an existing Cochrane review to answer relevant clinical questions. This approach allowed component-specific effects to be estimated and to identify combinations of components responsible for a clinically significant improvement in LOS. This approach could be utilised when considering cost effectiveness by identifying the most-effective combinations of components for a specific type of surgery. More intensive interventions may be justified on cost-effectiveness grounds for certain types of surgery. References 1. Welton NJ, et al. Am J Epidemiol 2009;169:1158 2. Powell R, et al. Cochrane Database of Systematic Reviews 2016, Issue 5 Art No:CD008646

18621
The area under the ROC curve may be a biased performance measure for meta-analysis of diagnostic accuracy studies. A simulation study

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Background: In systematic reviews of diagnostic accuracy studies, summary estimates of sensitivity and specificity and summary ROC curve are the preferred test-performance measures. In some of the recent systematic reviews, area under summary ROC (AUSROC) curve is also reported as an overall performance measure.
Methods: We investigated the performance of AUSROC estimates based on simulated test results in primary studies and 2-by-2 tables with different thresholds. Area Under the ROC Curve (AUC) was estimated in different ways: summary AUC from the HSROC/bivariate model; summary AUC from a meta-analysis of reported AUCs; and, an overall AUC from IPD meta-analysis. Four different scenarios were considered, with true AUC fixed at 0.64, 0.76, 0.81 and 0.91, respectively. True AUC was calculated based on parametric method with the known distribution (mean and SD) of test results. Performance of the estimates was assessed by bias and root-mean-square error.
Results: In all the 4 scenarios, the bivariate model using the pre-defined threshold always underestimated the AUC, while using the optimal threshold overestimated the AUC. Both approaches resulted in high RMSE. Meta-analysis of AUC, either from empirical estimate or distribution of the test results, performed fairly well. AUC calculated from pooling IPD data was not superior to meta-analysis of AUC, but was more accurate than estimating an AUC from the bivariate model. When the number of primary studies included in the meta-analysis increased from 5 to 20, all approaches returned a lower RMSE.
Conclusions: This simulation study provides empirical evidence for the observation that the AUHSROC cannot precisely estimate the performance of a test in a meta-analysis. Therefore, the AUHSROC should not be reported as an overall accuracy measure. By directly meta-analysing the AUC and its SE reported in primary studies, we can get a better summary estimate of AUC. Therefore, in those cases where the AUC may be a relevant measure of test accuracy, using the hierarchical models may not be the most accurate way to estimate the AUC.

Attachments: HSROC.pdf

18771
Quantifying how diagnostic test accuracy depends on threshold in a meta-analysis

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Background: Many tests for disease produce an explicit continuous measure, e.g. the concentration of a biomarker in a blood sample. This is dichotomised at some threshold to call the result positive or negative. In a meta-analysis of diagnostic test accuracy, the threshold used often varies across studies. To explain some of the heterogeneity in the meta-analysis and – more importantly – to identify the optimum threshold for clinical practice, it is intuitive to include reported threshold values as a covariate. However, guidance warns that this involves implicit assumptions that might not hold in practice.
Objectives: 1) To examine the assumptions involved in including threshold as a covariate in a meta-analysis of sensitivity and specificity; and, 2) to develop a more flexible model, requiring fewer assumptions. Methods and **Results:** The implicit assumptions when including threshold directly as a covariate in the meta-analysis model are strong and not widely plausible. However, these can be relaxed by using additional data that are often available. In particular, it is common for some studies to report sensitivity and specificity estimates at multiple thresholds. Although this is widely regarded as problematic (due to the additional complexities involved in data synthesis), these extra data allow much greater flexibility in modelling. We describe a new model for the effect of threshold on sensitivity and specificity, which makes use of these additional data and can be considered a generalised version of that recently described by Steinhauser et al. We fit the model using the WinBUGS software and demonstrate its utility with 2 case studies.
Conclusions: Using more data, where available, allows the effect of threshold on sensitivity and specificity to be modelled flexibly, requiring minimal assumptions. This increases the potential clinical utility of the meta-analysis results. Steinhauser S, Schumacher M. Rücker G, 2016. Modelling multiple thresholds in meta-analysis of diagnostic test accuracy studies. BMC Medical Research Methodology, 16: 97.

19275

Making sense of complex interventions: application of hierarchical meta-regression in a meta-analysis of diabetes quality improvement (QI) interventions

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Background: Systematic reviews often address complex interventions that have multiple components. Standard meta-analysis methods often do not adequately reflect the complexity of these interventions because compromises must be made to facilitate synthesis (e.g. multiarm studies are reduced to single-pairwise comparisons and only components that differ between arms are modelled in the observed difference of effect). As a result, the meta-analysis fails to include all available data and cannot isolate the effects of components that may be of interest to decision makers.
Objectives: To explore the utility of hierarchical meta-regression models in a meta-analysis of complex QI interventions for diabetes.
Methods: Systematic review of QI programmes for diabetes that included at least one of 12 QI strategies. We implemented a series of hierarchical models to assess the effects of QI strategies. We explored extensions of the

models to evaluate interactions among QI components and with contextual and programme-level covariates. Finally, we used the models to predict the combined effects of QI strategies previously not evaluated in the same QI programme while accounting for other features of the available data (e.g. large number of cluster randomised trials with missing data on the intra-class correlation coefficient).
Results: We included 278 RCTs. Hierarchical meta-regression models estimated effects of individual QI components, producing different rankings compared to standard methods. For example, while the 3 QI strategies Promotion of Self Management (PSM), Team Changes (TC), and Case Management remained the most effective strategies for reducing glycated haemoglobin, the effects of each strategy were smaller (presumably due to the better isolation of their individual contributions) and TC emerged above PSM as most effective. The models allowed the assessment of interactions and effect modification; model selection is ongoing and additional results will be presented at the Summit.
Conclusions: Background knowledge combined with flexible synthesis models can allow fuller use of available data in reviews of complex interventions such as QI programmes.

Short oral session 3: Tools for guideline development

18057
Clinical practice guidelines in India: quality appraisal and the use of evidence in their development

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Background: Guideline development has changed internationally with greater stress on the use of rigorous, transparent and evidence-based methods, but not much is known about these issues in India.
Objectives: 1. To appraise the quality of Indian guidelines for 4 conditions with the highest disease burden. 2. To understand the guideline development process in India and how evidence is used in it.
Methods: Guidelines for 4 leading causes of disability-adjusted life years in India, published on or after 1 January 2010, were searched in multiple electronic databases, related websites, and by contacting experts and checking reference lists, and were quality appraised using the AGREE-II appraisal tool. In-depth, semi-structured interviews with 15 people involved in the development of the included guidelines were conducted and analysed using the framework approach
Results: The median AGREE II domain scores for the 11 included guidelines were highest for 'scope and purpose' (81%) and 'clarity of presentation' (76%), and lowest for 'rigour of development' (31%) and ‘editorial independence’ (33%). Four main themes emerged: (1) guideline development is undergoing a transition towards the adoption of systematic, transparent and evidence-based approaches but several barriers in the form of attitudes towards use of evidence, lack of methodological capacity, inadequate governance structure and funding exist; (2) guideline development is an academic activity restricted to elite institutions and this affects the panel composition, the consultative process and the implementation of guidelines; (3) there are mixed views on patient involvement; and, (4) there are taboos and poor understanding of issues surrounding conflicts of interest.
Conclusions: Progress towards better-quality guidelines in India requires governance, planning and dedicated funding, changes to the medical curriculum and capacity-building efforts. Issuing agencies need to make panels more representative, search and appraise evidence appropriately, and have formal processes for formulation of recommendations and disclosure of conflict of interest.

18122
The Development of an Evidence Guideline for Traumatic Brain Injuries

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Background: Traumatic brain injury (TBI) has been estimated to affect 1.7 to 10 million people annually in the general United States population. TBI may occur less frequently in the workplace compared to other injuries, but it carries enormous per capita costs, in large part due to vocational issues of impairments, employability and productivity. It is estimated that the average lifetime cost of a TBI patient ranges from $600,000 to $1,875,000.
Objectives: To develop a TBI treatment guideline that provides evidence-based guidance on the treatment of working-age adults who have sustained TBI.
Methods: A comprehensive, systematic literature search was conducted using PubMed, Scopus, CINAHL, Google Scholar and the Cochrane Library. Randomised-controlled trials (RCTs), randomised-crossover trials, quality guidelines, meta-analyses and systematic reviews were the primary foci of these exhaustive literature searches. A quantitative scoring method was used to evaluate the quality of each RCT. A study is considered low quality if the composite rating was 3.5 or less, moderate quality if rated 4-7.5, and high quality if rated 8-11. This system results in a testable article score and more reproducible guidelines methods.
Results: A total of 146 PICO questions were addressed for the treatment of TBI. Our searches identified 437 RCTs of which 30 were high quality, 297 were moderate quality, and 110 were low quality. Recommended treatments for TBI include suicide prevention, attention-regulation training, occupational rehabilitation, cognitive behavioural therapies and oxygen monitoring and thresholds (Evidence C). Anger-management therapy, motivational interviewing and emotional training are recommended with insufficient evidence.
Conclusions: These guidelines provide more informed recommendations for the treatment of TBI with details to be presented.They may have considerable implications for health professionals.

18407

Old guidelines, the SIGN decision to remove guidelines at 10 years

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Background: Guideline development is time consuming and costly. Once published, guidelines may become rapidly outdated. SIGN has adopted a variety of approaches to ensuring that guidelines remain up to date and relevant. Despite this, very old guidelines remain a concern because the content could be out of date and the questions which the guideline addressed may no longer be relevant.
Objectives: We reviewed the current methods of updating guidelines to decide how to manage old guidelines.
Methods: We undertook several methods to keep guidelines up to date. We scrutinised and accepted appropriate requests for new versions of a guidelines. We undertook refreshes, selective updates or updated entire guidelines depending on the extent of the change required. We also used a process of rolling updates to a living guideline. We also introduced rapid formal reviews at 3 years. Despite this, some guidelines still reached 10 years with no recent changes and uncertain value. We therefore decided that as we could no longer guarantee that the contents of these guidelines were current that they should be withdrawn. When the guidelines were removed from the website we informed the relevant stakeholders via our normal communication channels. We then responded to the reaction of guideline users.
Results: We received a several general comments of disappointment that guidelines that were still of value were now missed. We also received some adverse criticism from users in clinical networks who used these guidelines as the definitive guides to management and standards. We met with these groups and worked with them to develop new proposals for more focused guidelines in key areas of uncertainty where new guidance would have the most impact.
Conclusions: Withdrawing guidelines at 10 years received a surprisingly low level of adverse comment but, where significant concerns were raised, we worked with these groups to produce requests for new, shorter, more-focused, 3-question guidelines which are now in our programme.

18514

A mixed-methods evaluation to improve the adaptability of WHO evidence-informed guidelines for nutrition actions

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Background: It is expected that global guidelines are informed by rigorous evidence and procedures. Yet the process of guideline development itself rarely undergoes the same scrutiny. In particular, there is limited information on whether countries find guidelines easy to adopt and adapt. This study summarises an independent evaluation of guidelines produced by the Evidence and Programme Guidance Unit, at the Department of Nutrition for Health and Development at the World Health Organization (WHO).
Objectives: The study aimed to determine the adaptability of the nutrition guidelines and to gather recommendations to improve their future development. Adaptability was defined by methodological quality and implementation of guidelines.
Methods: We employed a mixed-methods approach. The qualitative data were collected through a desk review and two waves of semi-structured interviews (n=12), and were analysed through axial coding. The assessment also included the use of two standardised instruments completed by key stakeholders. The Appraisal Guideline for Research and Evaluation questionnaire, version II was used to assess guideline quality (n=6), while implementability was assessed with the electronic version of the Guideline Implementability Appraisal (n=7).
Results: Key strengths of the guideline-development process were: the appropriate management of conflicts of interest of guideline developers and the systematic use of high-quality evidence to inform the recommendations. However, guidelines lacked precise implementation advice, which decreased the overall guideline implementability. Challenges related to collaborative work within interdisciplinary groups were also identified.
Conclusions: The mixed-methods approach allowed a rigorous framework to assess guideline adaptability, which was responsive to leads emerging from the qualitative data. Nutrition evidence-informed guidelines are of good methodological quality, but implementability requires improvement. Ways of improving relate to guideline content, the dynamics shaping interdisciplinary work, and actions for implementation feasibility. Financial support: Micronutrient Initiative, WHO.

18760

Management of Vascular Anomalies and Hip Dysplasia in Children According to International Recommendations

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Background: Management of different diseases in children is often complicated due to the lack of evidence concerning certain medical interventions in children, especially innovative ones.
Objectives: To develop up-to-date, evidence-based clinical guidelines and protocols of medical care for the management of vascular anomalies and hip dysplasia in children in order to provide unified quality care throughout Ukraine.
Methods: After the creation of the working groups on vascular anomalies and hip dysplasia in children consisting of leading specialists in the fields and senior paediatricians, the medical databases were searched for the best evidence. Unfortunately, the evidence for such clinical conditions in children is insufficient. This is mainly due to the complexity of performing randomised clinical trials in children.
Results: After the evaluation of the guidelines with the help of AGREE II, the clinical guidelines of the American Academy of Pediatrics and the International Society for the Study of Vascular Anomalies were selected for

adaptation and implementation in healthcare settings in Ukraine. Both these guidelines emphasise that the main issue in the management of these conditions is early detection. For this reason it was important to introduce such medical documents in Ukraine. The protocol of medical care for the management of vascular anomalies in children has already been approved by the Ministry of Health of Ukraine and the protocol on hip dysplasia in children is halfway through the approval process.
Conclusions: Introduction of modern medical and technical documents on the management of such conditions is an important achievement for the heath system of Ukraine. On the basis of the approved clinical guidelines and unified protocols each healthcare setting will be able to develop its own local protocols of care which will allow harmonisation of healthcare in Ukraine with best international practices.

18834
How to assess the overall quality of guidelines using the AGREE instrument

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Background: The Appraisal of Guidelines for REsearch & Evaluation (AGREE) instrument is a tool for development, assessment and reporting of guidelines. There are 6 domains (23 items) and the item(s) of overall guideline assessment in the original and second version of the AGREE instrument. There is no criterion of overall guideline assessment in the two versions, however, researchers using AGREE to assess guidelines have defined the standard.
Objectives: We aimed to collect the criteria of overall assessment of guidelines through reviewing research using the AGREE instrument to assess guidelines.
Methods: We searched MEDLINE (via PubMed) and Web of Science to identify studies using the AGREE instrument to assess guidelines. Two independent reviewers screened titles and abstracts, reviewed full-text, and extracted data.
Results: A total 61 studies were included, which were published from 2003 to 2015. Of those, 55.7% (34/61) studies used AGREE I, and the remainder (44.3%, 27/61) AGREE II. 63.9% (39/61) studies completed the overall assessment of guidelines. Of which, 39.3% (24/61) reported the criteria. We summarised 13 criteria. Most of the criteria (77%, 10/13) consisted of the special score of each domain and the number of domains with the special score.
Conclusions: The criteria for assessing the overall quality of guidelines using the AGREE instruments are not consistent but most are based on the special score of each domain and the number of domains with the special score. We suggest that the following five factors should be considered for overall assessment of guidelines: 1) the method and process of collecting the evidence; 2) the grading of quality of evidence and strength of recommendations; 3) the management of conflicts of interest; 4) the reporting of recommendations; and, 5) the release date of the guideline.

18880
WeCancer: a self-tracking platform for both oncology patients and physicians to allow standardised treatment

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Background: The incidence of cancer worldwide is estimated at 14 million and, by 2030, 27 million new cases of cancer will have been recorded, along with 17 million deaths. The absence of an individualised treatment due to the difficulties in following each clinical scenario; lack of registries with accurate information to determine prognosis and the treatment; and, the barriers that governments, especially from developing countries, face with drug importation eventhough developed and developing countries share the global burden of cancer equally, must be taken into account urgently. WeCancer is an oncology-support tool developed for oncology professionals and patients focusing on standardised treatment for cancer patients.
Objectives: To describe a new tool – WeCancer, that is a self-tracking platform for both oncology patients and physicians to allow standardised treatment. We will also present details on the operationalisation of this tool and initial results.
Methods: WeCancer merges technology with hope and assistance for cancer patients. The data are made available in a dashboard developed so that the oncologist can follow the patient's disease development more efficiently and accurately. These data include self-reported levels of wellbeing; adverse events such as headache, nausea, dizziness; as well as information on sleeping hours, exercise training, chemotherapy sessions, feelings of gratitude, etc. The data can be displayed daily or monthly, and practitioners can also cross reference variables (e.g. physical exercise vs. headache). The physicians register to use the software, and the information is validated through contact with their hospitals and institutions. They are able to add someone as a patient. Patients can also download the app through the Appstore or Playstore on their mobiles. Results and conclusions: Results from this project will be presented at the Summit.

19148
Disclosure and handling conflicts of interest in the clinical practice guidelines programme in Colombia

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Background: Conflicts of interest (CoI) during clinical practice guidelines (CPG) development may bias the recommendations and threaten the trustworthiness of CPGs. The Colombian Ministry of Health (CMH) started a CPG programme in 2011. Objective: To describe the process of CoI disclosure and handling in the Colombian CPG programme.
Methods: This was a cross-sectional study. We included all the CPG funded by the CMH. We extracted the information from the guideline document appendices. We described: number of panelists, disclosures, CoI characteristics and handling. A CoI Classification, a modified version of the National Institute for Health and Care Excellence (NICE) classification was used as a framework to carry out the analysis. Descriptive statistics were calculated
Results: In total 50 CPGs were included. On average, each guideline panel had 24.1 members (SD=10.1), 12 (SD=6.74) clinical experts, 6.7(SD=2.6) methodologists. 8.1 members/per CPG (38.5%) had any CoI, while 4.61 clinicians/per CPG (50.3%) had financial CoI. None of the experts were excluded from a CPG, and only one expert was excluded from one question/section of the CPG because of their CoI in 13 CPG of 37 CPG that reported CoI. The most frequent financial CoI were: receiving support for educational purposes (32% of CPG), being a speaker (26% of CPG), consultancies (10%) and owning stock in industry (8%). In total, 30 CPG (60%) and 12 CPG (24%) had more than 50 and 75% of members with any CoI, respectively. In 4 CPGs (8%) CoI were discussed by an independent group/committee, it was discussed by all members in 15 CPGs (30%) and by a subgroup in 17 cases (34%). In 24% of CPG, CoI disclosure and handling were not adequately reported.
Conclusions: CoI are common among members of Colombian CPG panels. In most panels the majority of members had financial CoI. However, less than half of cases with financial CoI excluded members from questions/sections. In general, handling was not appropriately performed or reported. Further research and guidance in how to disclose and handle CoI is urgently needed to reduce the impact and increase the trustworthiness of recommendations.

19338
Current status of PROMs in guidelines on osteoarthritis: a review

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Background: Patient Reported Outcome Measures (PROMs) are questionnaires that capture patients' views on their health status, and are deemed important for improving quality of care. Individual PROMs data can be used for screening, goal setting, monitoring and evaluation. Clinical practice guidelines are meant to facilitate delivery of good quality care, and should therefore uniformly support the use of PROMs. Little is known about the current recommended use of PROMs for individual clinical practice in guidelines for different disciplines.
Objectives: The goal of our study was to identify the frequency, type and recommended use of PROMs in guidelines with recommendations for diagnosis and treatment of osteoarthritis.
Methods: We searched PubMed, national and international guideline databases, and websites of organisations or caregiver associations of disciplines that provide care for patients with osteoarthritis.
Results: We included 42 guidelines containing 32 PROMs. The majority of the guidelines did not recommend PROMs. Most recommended PROMs were the visual-analog scale (VAS) for measuring pain, and the Western Ontario and McMaster Universities Arthritis Index (WOMAC) and the Knee injury and Osteoarthritis Outcome Score (KOOS) in hip and/or knee osteoarthritis. Guidelines provided scarce information about how PROMs should be used in clinical care and there is little overlap between different types of healthcare providers. Guidelines for physical therapy include 50% of the PROMs.
Conclusions: PROMs are lacking in most international guidelines on osteoarthritis. When PROMs are recommended, there is a wide variation within and between countries and professionals. There is little guidance for clinicians for using PROMs in clinical practice. For meaningful use in clinical practice guidelines should include information how PROMs should be used (e.g. for diagnostic-treatment purposes) and how scores should be interpreted. On behalf of the G-I-N Allied health working group

Short oral session 4: Evidence implementation and evaluation

18132
Integrating the evidence from an HIV/AIDS-related Symptom-Management Guideline into clinical practice: A preliminary study in China

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Background: Physical symptoms and mental disorders are prevalent among persons living with HIV (PLWH). Different symptoms among PLWHs are always associated with lower quality of life and poorer prognosis. In previous studies, we identified and validated an HIV/AIDS-related symptom-management guideline used by healthcare providers which was developed based on the current guidelines.
Objectives: This study was intended to integrate the evidence into clinical practice. We sought to examine the feasibility, appropriateness and effectiveness of an HIV/AIDS-related symptom-management protocol, which was developed based on the current best-available evidence.
Methods: The integrating process was divided into 4 stages: evaluating the status quo, building the evidence-based strategies, applying evidence-based decisions, and evaluating results. The HIV/AIDS-related symptom-management protocol developed using an evidence-based approach, involved a multidisciplinary team of

physicians, nurses, physical therapists, healthcare workers and patients, and applied the Fudan Pathway for Evidence-based Nursing Practice Model with pre-intervention and post-intervention symptom assessments, symptomatic treatments, health education, and psychological counselling, etc.
Results: 1) System changes: a new, revised symptom-management best-practices protocol was integrated into the daily work. The evidence-based quality assessment standard, the new pre-admission assessment tool, several symptom-assessment tools and a health education manual for HIV/AIDS patients were developed. 2) A mixed-model growth analysis showed a significantly greater increase in HIV/AIDS-specific QOL(MOS-HIV) scores for the group receiving the symptom-management protocol(α=2.36, P=0.04).
Conclusions: The evidence-based HIV/AIDS-related symptom-management protocol with a multidisciplinary implementation approach can improve the quality of life of patients, and has a high potential benefit in relieving negative symptoms. The protocol can be applied at other HIV/AIDS units or clinics.

18141

TRiads-P: A translational research programme to promote evidence-based practice in the community pharmacy setting

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Background: TRiads-P is a national, translational research programme funded by NHS Education for Scotland (NES) which adopts a co-ordinated approach using behavioural and theoretical research to achieve quality improvement in community pharmacy services.
Objectives: To improve the quality of pharmaceutical care of patients in Scotland through a multi-disciplinary programme of research.
Methods:A mixed-methods approach was adopted comprising four empirical elements to date: Consensus Study to identify priorities for practice. Diagnostic Study with community pharmacists and counter staff, to elicit key determinants of the target behaviour using the Theoretical Domains Framework (TDF). National Survey of community pharmacists in Scotland, to: measure current practice; measure beliefs, knowledge and attitudes regarding the target behaviour; explore which beliefs predict target behaviour. Intervention Development using the Behaviour Change Wheel (BCW) which comprises Intervention Functions and Policy Categories.
Results: The target behaviour selected was the management of over-the-counter (OTC) consultations. Information gathering is the main predictor of an evidence-based outcome with these consultations. The key determinants identified by the 30 TDF interviews included: lack of privacy, concerns regarding patient safety, having appropriate skills and knowledge. In total, 1 in 4 pharmacies in Scotland were represented in the survey. Substantial variation in practice was reported. Information gathering in general was associated with greater perception of privacy and intention. Elicitation of specific information (other medicines used/medical conditions) was associated with TDF domains of Optimism, Intention and Beliefs about Consequences. The survey results mapped to four intervention functions (Education, Persuasion, Modelling, Enablement) and one Policy Category (Guidelines).
Conclusions: TRiads-P uses a systematic theory-based approach to develop interventions to promote the translation of evidence into practice. A toolkit of interventions is being developed, the components of which are underpinned by the results of this programme.

18176

Embed evidence to improve quality of care: a pooled analysis of 34 evidence-implementation projects in China

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Background: Evidence implementation is the most challenging part of evidence-based nursing. In China, a series of evidence-implementation projects have been carried out in the past 5 years, using the Joanna Briggs Institute Practical Application of Clinical Evidence System and Getting Research into Practice audit and feedback tool. A total of 7 hospitals, 27 wards and 616 nurses were involved.
Objectives: To ascertain barriers to compliance with best practice and strategies to overcome these barriers; and, to evaluate the outcomes of evidence implementation from a patient , nurse and organisational perspective.
Methods: This study is a pooled analysis of 34 evidence-implementation projects. Content analysis was used to extract data from the original reports and structured interviews were used to describe nurses' experiences.
Results: 125 barriers were mentioned among 34 projects and 11 themes were extracted. The most common barriers were nurses' lack of knowledge or skills; nurses' lack of instruments to assess or record; patients lack of knowledge or skills; increased workload or limited human resources; lack of nursing procedures or workflows; and, lack of multidisciplinary co-operation. 200 strategies were used to overcome the barriers and 7 themes were extracted. These were nurse education via multiple materials; introducing or developing instruments; patients' education via multiple materials; building nursing procedures or workflows, building multidisciplinary co-operation, introducing/developing equipment or facilities; and increasing human resources and rewards. The average compliance to best practice was raised significantly from 32.1% to 93.1%. In 34 projects, 8 improved patient outcomes, 19 increased patient knowledge or skills, 32 increased nurse knowledge or skills, and 33 revised nursing procedures or workflows.
Conclusions: These projects led to improvements in nursing practices and patient outcomes. Various strategies, such as an effective training programme, simple and clear assessment instruments, and multiple education materials, can facilitate implementation of best evidence into clinical practice.

18456

Plotting guidelines, tools and initiatives on the quality cycle of 30 subjects to improve care and co-operation

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Background: As part of a large, nationwide programme to reduce healthcare costs and improve quality of healthcare, the so-called quality cycles of 30 subjects were drawn up. The cycles plotted tools and initiatives in 3 steps: describing good care; implementation; and measurement/evaluation. For each step 3 levels were reviewed: patient-doctor, institutional and macro/national.
Objectives: To get the quality circle turning by obtaining a clear picture of the subject whilst identifying which tools and initiatives already exist, what is missing, prioritising bottlenecks and developing action plans to solve these with parties across the care spectrum. The second objective was get parties to know each other and work together.
Methods: The project ran from 2015 to 2016 an a mix of methods was used. Desk research was performed to map the steps of the 30 quality cycles. Interviews were performed with patient and medical specialist associations. Interactive meetings were organised, in which various stakeholders discussed the cycle, added to and adjusted it and agreed on and prioritised the bottlenecks. For the top-5 priorities action plans were developed (stating the 5 Ws, possible funding and timing).
Results: This project yielded insight into the current state of affairs for 30 subjects. Almost 700 participants attended the meetings and created nearly 150 action plans to improve quality of care. Although many tools were available describing good care, such as guidelines and patient-decision aids, tools for implementation and evaluation were less abundant.
Conclusions: The quality cycle is suitable to identify existing tools, initiatives and bottlenecks. The meetings helped to establish contact between stakeholders, allowing a better understanding of each other's perspectives. However, greater effort is needed to get the cycle turning. Furthermore, there seems to be an emphasis on

describing good care but the next steps appear to be missing. Perhaps because of lack of knowledge about implementation or change management. This means that use of tools like guidelines is suboptimal, which is a pity considering the effort and time put into them.

18483

An evaluation of theoretical and operational fidelity of best-practice implementation studies conducted in low- and middle-income economies

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Background: Implementation programmes often rely on participant experiences to inform programme review and evaluation. While generating value-impact statements, they may lack objectivity and the conceptual basis to provide a robust, external evaluation of programme fidelity and integrity. The Centers for Disease Control and Prevention (CDC) evaluation framework provides a standardised, theory-informed framework by which implementation groups can map and systematically evaluate overall programme structure and effectiveness across 6 key domains (engaging stakeholders, the programme outline, the programme design, gathering credible evidence, justifying conclusions, and ensuring use and sharing of lessons learned).
Objectives: To map the Joanna Briggs Implementation Programme against the steps and standards in the CDC framework and logic model. To identify goodness of fit, including gaps and limitations in organisational planning within the JBI Implementation programme.
Methods: The JBI Implementation Science team mapped the objectives and programme elements of the JBI Clinical Fellowship programme against the 6 steps of the CDC evaluation framework. A second comparison of the CDC framework against 24 published implementation reports was then used to evaluate fidelity and establish the extent to which the JBI implementation programme framework was integrated in clinical fellows' reports.
Results: The JBI programme showed goodness of fit with 4 of the CDC domains; but poor fit was found with engaging stakeholders and sharing of lessons learned. Fidelity evaluation of individual implementation studies demonstrated engaging with stakeholders and using and sharing lessons learned was central to each project but may not be well represented in the overall programme design.
Conclusions: The evaluation demonstrates that change in practice can be achieved with programme fidelity in resource-limited settings if interventions are supported by credible evidence and facilitation implications for programme design are discussed within a low- and middle-income economy context.

18508

Quaternary prevention - the role of Point-of-Care tools

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Background: Improvements in healthcare have led conversely to overtreatment and overdiagnosis. Quaternary prevention is defined as an action taken to identify patients at risk of overmedicalisation, to protect them from new medical invasion, and to suggest alternative, acceptable care. Point-of-care tools, such as BMJ Best Practice and Practical Approach to Care Kit (PACK), are ideally placed to educate, support clinical decision making and help practitioners to rapidly identify the medical issues related to overdiagnosis or overtreatment during the routine course of care. In this way point-of-care tools could help rationalise what care, investigation and treatment is given.
Methods: Selected issues associated with overuse of care were identified in BMJ Best Practice, a point-of-care web- and mobile-based tool for use by healthcare professionals. These were then assessed to review Best

Practice's existing approach to quaternary prevention and a possible future strategy to highlight relevant aspects and aid in averting overuse of care. The selected issues were: - Routine screening tests for people at average risk: prostate-specific antigen (PSA) for prostate cancer in the absence of shared decision making; - Diagnosis: imaging for nonspecific, low-back pain without red flags; and, - Treatment: antibiotics for suspected uncomplicated acute otitis media.
Results: The risks and benefits associated with the selected issues were all well-described in BMJ Best Practice in applicable subsections. New features such as the incorporation of Cochrane Clinical Answers and BMJ Rapid Recommendations allow for rapid assessment of the evidence base at the point of care, promoting informed and shared decisions. Delivering this in more visual ways has the potential to improve uptake but needs further testing.
Conclusions: Web and mobile decision-support applications can raise awareness of overdiagnosis and overtreatment during the course of the clinical workflow. Examples of areas where this may be helpful include selected screening tests for people at average risk, and selected treatments for people with uncomplicated or chronic conditions.

18848

Enhancing guidelines implementation: the example of ECIBC and its European Guidelines for breast-cancer screening and diagnosis.

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Background: The European Commission Initiative on Breast Cancer (ECIBC) aims to ensure and harmonise the quality of breast cancer (BC) care across European countries on a sustainable basis, contributing to improving health and reducing health inequalities.
Objectives: 1.Development of a voluntary European Quality Assurance (QA) scheme (includes quality and safety requirements, relevant to citizens, for BC services in Europe, whenever possible based on evidence).
2.Compilation of evidence-based recommendations on BC screening and care services in Europe (developing European Breast Guidelines on screening and diagnosis, and collecting existing high-quality evidence-based guidelines on all BC-care processes on the Guidelines Platform).
Methods: The European Breast Guidelines are being developed using the GRADEpro Guideline Development Tool. Evidence-to-Decision frameworks (EtDs) are used to provide a systematic, transparent process from evidence to the healthcare decision. Guideline implementation will be enhanced: via the European QA scheme; involving stakeholders at all ECIBC development phases, e.g. 27 'Country tables' (composed of national health authorities, national accreditation bodies, patients, professionals,etc.) were organised at the ECIBC Plenary 2016 to foster discussion on barriers and facilitators to implementing the first recommendations, and a ECIBC roadshow in all countries is being planned; and, using 'dedicated languages' for recommendations to be understood by policy makers, professionals and individuals.
Results: The first evidence-based recommendations on age ranges for BC screening have been published (complete EtDs) on a dedicated webpage. Policy makers can assess how the evidence (particularly resource use and cost effectiveness) relates to their particular population to enable informed decision making.This evidence is made available to define QA scheme requirements.
Conclusions: The multidisciplinary, transparent and robust development process used, together with coupling the guidelines with a QA scheme that will assess their correct implementation and continuous stakeholder engagement will enhance implementation.

19093

Exploring barriers and facilitators to South African primary care clinical guideline implementation: perspective of clinicians

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Background: Clinical practice guidelines (CPGs) risk having little impact on healthcare worker practice, if not effectively disseminated, communicated and implemented. The South African Guidelines Excellence (SAGE) project is a collaborative project exploring the CPG landscape in South African primary care including engaging primary care healthcare workers regarding their perspectives on CPGs.
Objectives: Exploring barriers to and facilitators for CPG implementation and use by South African primary care clinicians.
Methods: We conducted 7 focus groups in 4 provinces in South Africa. Clinicians included: nurses, dieticians, dentists, doctors and allied health practitioners, from primary care facilities in rural, urban and peri-urban settings. We used semi-structured interview guides and transcribed these verbatim. We adopted a thematic approach to analysis which was iterative and integrated into all phases of the research. The rigour applied to data collection and analysis is reflected in an audit trail that includes post-interview reflective summaries, peer debriefings, and expert input into analysis workshops for enhancing intercoder reliability and agreement.
Results: Focus groups took place between November 2015 and August 2016 in the Eastern Cape, Western Cape, Kwazulu-Natal and Limpopo provinces. Clinicians at facilities were receptive to using CPGs, and generally felt enabled by them. Nurses felt more independent with increased confidence to treat patients where doctors were scarce. Enablers include 'ease of use' such as design features, using local language, training and physical access to CPGs; 'system-level facilitators' include supportive audits to help identify gaps, accessible clinical support and community involvement for accountability; other enablers included 'strong teamwork'; and 'involvement of partner non-governmental organisations'. Barriers generally mirrored enablers.
Conclusions: Primary care clinicians' perspectives on potential enablers to CPG use can help identify approaches to better implement these to improve South African healthcare.

19335
Barriers and facilitators to implementation in dementia care: Findings from a qualitative evidence synthesis

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Background: Poor implementation of evidence-based practices is likely to contribute to the variable quality observed within dementia care. If we are to deliver the best-possible dementia care, we need to have a better understanding of how to implement evidence-based practice. As part of a larger mixed-methods systematic review on implementation within dementia care, we sought to understand what helps and hinders implementation.
Objectives: To present review findings pertaining to qualitative evidence on factors that act as barriers and facilitators to implementation within dementia care.
Methods: Twelve databases were searched from inception to October 2015 supplemented by forward citation chasing and contact with organisations to identify unpublished reports. Two reviewers independently screened titles and abstracts, reviewed full texts, and performed data extraction and quality appraisal (Wallace criteria). Thematic analysis was used to synthesise across studies.
Results: Twenty eight studies of good quality were included. Barriers and facilitators to implementation were clustered into four broad levels: innovation, family and patient, staff, and organisational. Emerging themes highlight multiple factors across levels that can shape and transform implementation within dementia care. Varying levels of receptivity, engagement, professional skills, communication and collaboration, leadership support, resource availability and existing conditions in dementia care settings can impede or facilitate practice change. However, studies reveal limited information about ways to overcome barriers, and the involvement of people with dementia in implementation appears to be minimal.
Conclusions: This qualitative synthesis highlights the multifactorial and complex nature of implementation within

dementia care. Our findings indicate that successful implementation requires collaborative efforts that involve actions and support at the family, staff and organisational level. Future research needs to move beyond identifying barriers and facilitators, and examine strategies to address them in order to improve dementia care.

Short oral session 5: Assessing quality and certainty of evidence

18045

Presentation of time-to-event outcomes in GRADE Summary of Finding (SOF) tables: Evaluation of Cochrane Cancer Reviews

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Background: Time-to-event outcomes are commonly used in survival analyses to describe the duration of time until a given event (e.g. death) and are usually measured as hazard ratios (HR). The GRADE approach to calculating absolute effects is to establish a baseline (event rate at a particular point in time) in the control arm and then apply the HR to calculate the event rate in the intervention arm. The challenge arises around the uncertainty of what the event is that the outcome describes and how absolute-effect size is interpreted.
Objectives: To assess how time-to-event outcomes are presented in Summary of Findings (SOF) tables.
Methods: Based on an a priori protocol we systematically identified all Cochrane Cancer Reviews that reported at least one outcome measured as HR and provided a SOF table (published 2011-2016). Six authors performed all steps in duplicate and disagreements were solved by discussion. We extracted data regarding the calculation of absolute effects, consistency between outcomes in abstract, methods, results and SOF table, and assessment of censoring.
Results: 77 reviews met our inclusion criteria. In 21 (27%) no absolute effect for HR outcomes was calculated. In 14 (18%) absolute effects in SOF tables were correctly calculated and labelled and no confusion occurred between positive (people alive) and negative (deaths) events throughout the review. 12 reviews (16%) provided wrong results by entering positive event-control risk into GRADE software, leading to less instead of more people alive in the favoured arm. In 22 (29%) reviews absolute effects were correctly calculated, but confusing, as there is no link between outcomes in the review (e.g. survival) and outcomes in SOF (e.g. mortality, negative event). For eight (10%) reviews it is completely unclear how authors assumed control risk and whether results are correct. Only 5 reviews reported censoring in survival curves and discussed potential impact.
Conclusions: There is an urgent need for author guidance on how to calculate absolute effects based on HR data and how to present data. Moreover, censoring in individual trials should be taken into account.

18093

Confidence in qualitative synthesised findings: A principled and pragmatic critique of ConQual and GRADE-CERQual

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Background: The ConQual approach for the assessment of the confidence in synthesised qualitative research

findings in systematic reviews of qualitative evidence was proposed for the Joanna Briggs Institute's meta-synthesis by meta-aggregation, and the GRADE Confidence in the Evidence from Reviews of Qualitative research (GRADE-CERQual) approach for assessing confidence in qualitative evidence syntheses findings was designed for syntheses of qualitative evidence.
Objectives: To provide a principled and pragmatic critique of the ConQual and GRADE-CERQual approaches and offer suggestions for their improvement.
Methods: Assessment of ConQual and GRADE-CERQual approaches informed by a critical review of the methodological literature on the quality criteria used in qualitative research and on the conduct of systematic reviews of qualitative research, and by insights from hermeneutics and American pragmatism philosophy.
Results: Potentially serious flaws may be evident in both the ConQual and GRADE-CERQual approaches when evaluated critically from theoretical, philosophical, and practical perspectives. These flaws appear to be related to the conceptualisation of the nature of confidence in qualitative research and of the aim of establishing confidence in synthesised findings in syntheses of qualitative research, the selection of criteria for establishing confidence, the justification provided for these criteria, and the operationalisation of the criteria.
Conclusions: Based upon our assessment, we suggest that both ConQual and GRADE-CERQual should be revised. We provide suggestions for correcting the identified flaws.

18283
The CREATE Critical Appraisal Tool: A Tool To Appraise Research From Aboriginal and Torres Strait Islander Perspectives

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Background: In health research, systematic reviews are widely used to guide decision makers towards implementing best practice in policy and healthcare. Systematic reviews that assess and synthesise the best-available evidence on questions relevant to Aboriginal and Torres Strait Islander community priorities can help improve Aboriginal and Torres Strait Islander health. However, the criteria represented in standard critical-appraisal tools are grounded in Western notions of research quality, and do not incorporate indigenous methodologies or criteria that assess research from an Aboriginal and Torres Strait Islander perspective.
Objectives: The aim of this study was to develop and trial a tool with unique criteria for assessing the quality of research from an Aboriginal and Torres Strait Islander perspective.
Methods: Senior Aboriginal and Torres Strait Islander health researchers, together with ethicists and systematic review experts, developed a tool and a user guide over a 2-year period, using a combination of literature reviews and interactive group work. A modified Delphi method was used to assess the face validity, reliability and feasibility of the tool. An Australian panel comprising senior Aboriginal and Torres Strait Islander researchers critiqued the tool and made recommendations for improvements. Systematic reviewers then trialled the tool for reliability and feasibility. Results and
Conclusions: The outcome of the study is a tool that aligns with Aboriginal and Torres Strait Islander values and indigenous methodologies that provide critical appraisal of research through an Aboriginal and Torres Strait Islander lens, which can be used in conjunction with existing critical-appraisal tools. The tool will also be useful for promoting credible and ethical primary research with Aboriginal and Torres Strait Islander communities. Thus increasing the quality of the health research conducted with Aboriginal and Torres Strait Islander communities, its translation into policy and practice and, ultimately, health outcomes.

18342
Quality ratings of reviews in overviews: a comparison of reviews with and without dual (co-)authorship

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Background: Previous research shows that many authors of Cochrane overviews were also involved in some of the included systematic reviews (SRs). This type of dual (co-)authorship (DCA) may be considered to be a conflict of interest and a potential source of bias. No research has been conducted to investigate this in non-Cochrane overviews. Whether DCA constitutes a potential source of bias has also not been examined empirically.
Objectives: To estimate and compare the prevalence of DCA in overviews of reviews and investigate potential bias arising from DCA regarding quality assessments of included SRs.
Methods: We selected a sample of Cochrane (n=20) and non-Cochrane (n=78) overviews for analysis. We extracted data on the number of reviews affected by DCA and whether quality assessment of included reviews was conducted independently. We also extracted data on the quality assessments of the included SRs and compared mean quality scores of SRs affected versus not affected by DCA (for example, the number of items fulfilled in AMSTAR assessments). We calculated standardised-mean differences (SMD) to account for different assessment tools.
Results: Forty out of 78 non-Cochrane overviews (51%) and 18 out of 20 Cochrane overviews (90%) had included at least one SR with DCA. For Cochrane overviews, a median of 5 [interquartile range (IQR): 2.5 to 7] SRs were affected by dual (co-)authorship (median of included reviews 10). For non-Cochrane overviews a median of 1 [IQR: 0 to 2] of the included SRs were affected (median of included reviews 14). SRs affected by DCA scored significantly better in methodological quality assessments than SRs not affected by DCA (SMD: 0.58 [95%-CI: 0.27 to 0.90]).
Conclusions: Many authors of overviews often have an authorship on one or more of the underlying reviews. Our analysis shows that, on average, authors of overviews give higher-quality ratings to SRs in which they were involved than to other SRs. Conflict of interest is one explanation, but there are several others such as reviewer expertise. Independent and blinded reassessments of the reviews would provide more robust evidence on potential bias arising from DCA.

18433
Should we trust author correspondence? A case study looking at risk of bias

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Background: Cochrane review authors are often unable to obtain all the necessary trial information from available reports, especially when reports are conference abstracts. The Cochrane Handbook recommends review authors contact trial investigators to obtain this information. It is not known whether this correspondence is helpful to the review process, and how it impacts on trial information captured by the review, such as risk of bias.
Objectives: To determine how risk-of-bias assessments change after contact with trial investigators.
Methods: This was a substudy undertaken during creation of the review 'Endometrial scratching for pregnancy following sexual intercourse or intrauterine insemination (IUI)' which included 10 RCTs. Attempts were made to contact trial authors by email to clarify methods relating to risk-of-bias assessments. Investigators were emailed with open-ended questions such as 'Please describe in detail the process of allocating participants to the trial arms'.
Results: An initial response was received from 8/10 trial teams. A total of 15 changes to risk-of-bias assessments were made (15/70, 21%). The majority of the changes were from unclear to low risk (10/15). The domain of 'allocation concealment' had the most changes (5). In a number of instances the information provided by the trial team conflicted with information in the published papers, or online trial registrations. For example, differences in the total number of women randomised, or whether participant blinding occurred. This correspondence also enabled discovery of additional and unanticipated risks of bias, such as the undisclosed inclusion of non-

randomised participants in the trial denominators. It remains unclear whether trust is best placed in information provided in the published (often peer-reviewed) reports, or in subsequent author correspondence.
Conclusions: Correspondence with trial authors resulted in a large number of changes to risk-of-bias assessments. Review authors must exercise their judgement when amending risk-of-bias assessments based on this correspondence, and clearly report the sources of information in the 'support for judgement'.

18611
More than 30 nutritional studies assessed with ROBINS-I – lessons learned

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Background: The health effects and safety of non-nutritive sweeteners were investigated through various studies, with different study designs. ROBINS-I is proposed as a tool for quality assessment of non-randomised studies (non-RCTs).
Objectives: To assess the quality of non-RCTs with ROBINS-I, as part of a systematic review about health effects of non-nutritive sweeteners.
Methods: We used standard systematic review methodology as proposed by the Cochrane Handbook for the systematic review. Quality assessment of non-RCTs was conducted using ROBINS-I following the published guidance. A common understanding on how to assess each ROBINS-I domain was sought for in repeated discussions prior to assessment. Pairs of researchers independently assessed risk of bias in all domains and noted their results and comments in an Excel sheet. A harmonised understanding of the domains and the judgement was supported by discussing disagreements after initial assessment.
Results: We identified and included 60 studies in the systematic review. Of these, 32 were non-RCTs, including 9 non-RCTS or quasi-RCTs, 6 cohort studies, 16 case-control studies, and 1 cross-sectional study. Most non-RCTs had a serious risk of bias according to ROBINS-I assessment. A common understanding of the domains and judgement procedure during assessment had to be established by using the ROBINS-I guidance and during various group discussions.
Conclusions: The initial understanding of and the judgement with the ROBINS-I assessment tool varied slightly across researchers, but a common understanding could be established by using the guidance and group discussions. Comments and notes about common methodological procedures in nutritional research supported the judgement of the study quality. Guidance for the quality assessment of different study designs with ROBINS-I would be helpful in our perspective.

18701
Defining and assessing the certainty of evidence for diagnostic test accuracy in systematic reviews, health technology assessments, and guidelines

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Background: Recent work has clarified the GRADE (Grading of Recommendations Assessment, Development and Evaluation) definition of the certainty of evidence, and its application for interventions (1). A clarification of how

these concepts apply to certainty ratings of diagnostic test accuracy is needed. This is especially important as it relates to frequent lack of direct evidence assessing the effect of tests on important patient outcomes.
Objectives: To define and clarify possible approaches to judging certainty of evidence for diagnostic test accuracy within a systematic review, health technology assessment, or clinical practice guideline when only test accuracy results are available.
Methods: After initial brainstorming, the investigators iteratively refined and clarified the approaches using input from workshops and discussions at GRADE Working Group meetings.
Results: We propose the application of the same approaches for rating the certainty of evidence for diagnostic test accuracy results as those previously described for intervention effects (Table 1). The key challenges of applying these approaches on evidence of test accuracy were identified and include rating the certainty of evidence when no direct comparison is available, considering the downstream consequences of the test results (for example, impact of false-positive results on important patient outcomes), and setting a clinically meaningful threshold in the contextualised setting. We illustrate how these challenges can be addressed using real-life systematic reviews and we will show examples at the Summit.
Conclusions: The application of the GRADE certainty of evidence concepts on evidence of test accuracy will provide a useful framework when assessing, presenting, or making decisions based on the certainty of evidence for diagnostic test accuracy. Reference 1. GRADE ratings of certainty of evidence: clarifying the conceptual framework; Hultcrantz et al., under consideration by JCE.

Attachments: Table 1.pdf

18799
Applying the GRADE-CERQual approach: Experiences from the development of an EPOC qualitative-evidence synthesis

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Background: Qualitative-evidence syntheses published in the Cochrane Library provide evidence that can inform or complement effectiveness reviews. The GRADE-CERQual approach assesses confidence in the evidence generated from these syntheses, based on 4 key components: methodological limitations of studies contributing to a review finding; coherence of the review finding; adequacy of the data contributing to a review finding; and, relevance of the included studies to the review question. Several syntheses published in the Cochrane Library have now utilised this approach. These experiences provide opportunities for learning and further development of GRADE-CERQual.
Objectives: To discuss our experience of applying GRADE-CERQual to the synthesis: 'Factors that influence the provision of intrapartum and postnatal care by skilled birth attendants in low-and middle-income countries'.
Methods: As part of the analysis of the qualitative evidence synthesis, one review author applied the 4 components of GRADE-CERQual, and made a judgement about the overall confidence in each review finding. Discussions were held with one or two other co-reviewers to refine the GRADE-CERQual assessment. We judged our confidence as high, moderate, low or very low.
Results: Of 51 findings, we graded 2 as high confidence, 16 as moderate confidence, and the remaining findings as low or very low confidence. The synthesis included descriptive and complex findings with varying degrees of transformation. Application of GRADE-CERQual to such complex findings presented unique challenges. For instance, more transformed findings often led to concerns about coherence and the review team had to choose between more descriptive and less-transformed findings to increase level of confidence in the finding; or opt for more transformed findings that were potentially more helpful to decision makers. We will also describe the unique challenges that arose in relation to our framing of the overall assessment of confidence and in creating summaries

of the findings.
Conclusions: Our experiences in applying GRADE-CERQual provide useful insights for further development of the approach.

19189
Developing Summary of Findings Tables in Network Meta-Analysis: A user-testing study

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Background: When multiple interventions are available for managing the same disease or condition, network meta-analysis (NMA) using direct and indirect comparisons may provide optimal estimates of their relative effectiveness. The best approaches to presentation and interpretation of NMA results for users, however, remain uncertain.
Objectives: To develop NMA-'Summary of findings' (SoF) tables that display the most important aspects of NMA results.
Methods: Principles of fundamental qualitative description informed processes to develop and pilot NMA-SoF tables. We conducted 3 rounds of interviews. Following development, the NMA-SoF table was presented to a purposeful sample of 10 clinicians, each of whom had used a meta-analysis or NMA at least once in the previous year to answer research or clinical questions related to patient healthcare. In-depth semi-structured interviews were conducted to obtain feedback on the positive and negative aspects of the table. Data were analysed using conventional content analysis. After each round, we modified the NMA-SoF table based on feedback. A refined version of the NMA-SoF table was presented to a new set of 10 users in a subsequent round. The definitive table will emerge from the third round of feedback.
Results: At the end of this study, we will have one or more formats of NMA-SoF tables that summarise the NMA results that users find friendly and informative.
Conclusions: Effective presentation can increase the usability and help health professionals make better-informed decisions. Our work is aimed at developing optimal formats for NMA-SoFs.

Attachments: Cochrane_2017_NMA_user-testing_FINAL.pdf

Short oral session 6: Evidence synthesis methods

18074
Innovation in systematic review methods: successive developments in framework synthesis

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Background: Systematic reviews have evolved to address complex issues across health and social policy. Framework synthesis is increasingly employed in systematic reviews to address such complexity. Adapted from framework analysis methods used in primary research, framework synthesis begins with an a priori conceptual framework, which develops iteratively as new data are incorporated and themes are derived from the data. However, framework synthesis appears to have been applied in different ways.
Objectives: To describe and consider the ways in which framework synthesis is applied and how it is situated in, and contributes to, wider debates about health research synthesis methods.
Methods: A systematic review was conducted of the literature discussing or employing framework-synthesis methods. Data from included papers were ordered according to an a priori conceptual framework and data synthesised using framework-synthesis methods and constant-comparative analysis.

Results: We identified 53 papers either discussing or conducting framework synthesis. Earlier reviews synthesised research on people's experiences of health or healthcare, while newer reviews examined health policy issues. Critical consideration of the transferability, trustworthiness or credibility of findings is inconsistently reported. More recent reviews employing framework synthesis have innovated by: building conceptual frameworks from the views of key stakeholders, including the public; utilising those conceptual frameworks in discussions with review stakeholders; and, in the application of mixed and multiple research methods for synthesis. These innovations can help support stakeholder priorities and ensure that conclusions and recommendations reflect their needs.
Conclusions: Framework synthesis is a flexible research-synthesis method that can meet the complex conditions arising from health policy and healthcare issues. Used increasingly in mixed-method synthesis that emphasises diverse stakeholder consultation, it is a method designed for decision making because it is not framed by academic disciplines or methodologies but by concepts that transcend them.

18376

Use of machine-learning tools to support efficient study identification in Cochrane reviews: A case study and cost-effectiveness analysis

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Background: Study identification is a time-intensive phase of systematic-review production and a key driver of the total cost. Machine-Learning (ML) tools have the potential to speed up study identification and reduce manual screening workload, making previously intractable reviews with 'too many records' problems more feasible. However ML tools have not previously been deployed in Cochrane reviews.
Objectives: To explore and evaluate the use of ML tools to support efficient study identification in Cochrane reviews.
Methods: A novel, semi-automated screening workflow – incorporating both active learning and topic-modelling tools – was designed and implemented in a Cochrane Public Health review to help identify eligible studies among c. 157 000 unique citations retrieved by electronic searches of 11 databases. Electronic searches were supplemented by extensive searches of other resources. A cost-effectiveness analysis (CEA) was conducted to model and compare: (A) the novel, semi-automated workflow; with (B) a conventional screening workflow; and, (C) a semi-automated workflow incorporating active learning without topic modelling.
Results: Use of the novel, semi-automated workflow (A) reduced manual title-abstract screening workload by 83% in this review, compared with conventional screening (B), without any loss of recall. Topic modelling did not identify any eligible studies. Searches of other resources identified 4 further eligible studies but none were published prior to the date of last search, so were not represented among the c. 157 000 electronic search results. A full set of CEA results will be presented. Prior to having full CEA results, it is clear that the modelled semi-automated workflow incorporating active learning without topic modelling (C) 'dominates' the other options (A and B) in this case, i.e. it would cost less, with identical recall.
Conclusions: Use of ML tools can make study identification more efficient in Cochrane reviews that have a 'too many records' problem. Further evaluations of ML tools are needed to assess the generalisability of this finding and to help build an evidence base for efficient workflow design in reviews.

18718

Updating DataBase: an open access living repository of methodological documents about updating systematic reviews and clinical guidelines

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Background: The volume of scientific information is increasing at an exponential rate. Moreover, the publication of scientific information is spread across hundreds of biomedical journals, in many cases, difficult to access, and offering no guarantee of methodological rigour. It is therefore difficult and inefficient for any potential user to compile what has been published on a given topic.
Objectives: To identify, classify, and share methodological documents about updating systemic reviews (SRs) and clinical guidelines (CGs).
Methods: We conducted searches in MEDLINE (monthly email alert) and Cochrane Methodology Register. In addition, we searched for publications by selected relevant authors (monthly email alert in MEDLINE); references to relevant documents (real-time email alert in Google Scholar); Scientific Resource Centre (SRC) Methods Library (weekly email alert); SuRe Info: Summarized Research in Information Retrieval for HTA; abstracts books from Cochrane Colloquiums and G-I-N Conferences (hand search); reference lists of the included studies (hand search); and, documents referred to by experts in the field. We included: 1) methodological studies; 2) comments, editorials or letters; 3) methodological guidelines; and, 4) other methodological documents (academic dissertations or protocols). We exclude updated SRs or CGs. One reviewer screened titles and abstracts and a second reviewer independently checked included documents. Two reviewers independently classified the included documents by: type of publication, type of study design, type of updated document and key words. Methodological documents are shared with interested stakeholders via an online platform (EndNoteWeb).
Results: We will present methods and up-to-date results of the comprehensive living strategy at the Summit.
Conclusions: We propose a comprehensive living strategy to identify and classify methodological documents about updating SRs and CGs. The Updating DataBase is an ongoing project that will facilitate the search for information about the updating and dissemination of methodological guidance.

18902

Uniqueness of conducting systematic reviews and developing nutrition practice guidelines: Experiences and challenges from Academy's EAL

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Objective: To understand and learn the challenges in conducting systematic reviews and developing guidelines in the field of nutrition.
Background: The Academy's Evidence Analysis Library (EAL) conducts stand-alone systematic reviews (SRs) and SRs that inform Evidence-based Nutrition Practice Guidelines (EBNPG). EAL's methodology for conducting SRs and developing guidelines is based on gold-standard methods that have been normally used in medical fields. Some tools have required modification to fit the unique challenges in nutrition-related literature. Currently, there are no standardised tools specific to nutrition-related topics.
Methods: Identify unique challenges in conducting systematic reviews and developing nutrition guidelines. Conclusion: Common issues faced are: lack of strong study designs; level of exposure (no true placebo); heterogenity of intervention; confounding variables (single nutrient vs. dietary patterns, nutrient status); blinding not possible; lack of health outcomes (most nutrition outcomes are biomarkers or intermediate); and, lack of standardised outcomes. Another challenge faced by the EAL is the lack of methodological experience of the workgroups which are routinely composed of topic experts.

18940

Use of machine learning to conduct systematic reviews of patient values and preferences in the context of guideline development

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Background: In the context of clinical practice guideline development we conducted a systematic review on patient values and preferences, or how patients value healthcare outcomes, following the GRADE evidence-to-decision framework. Challenges with these systematic reviews arise as a sensitive search strategy results in a large number of citations to screen, so alternative strategies to balance sensitivity and feasibility are needed.
Objectives: To describe our experience of using a machine-learning model to exclude citations for screening in the context of a large systematic review.
Methods: We ran a sensitive search strategy in MEDLINE and EMBASE. We used the Collaboratron™ platform for: the screening in duplicate of a training sample of the search results (records from 2014 to 2016); the development of a machine-learning model to predict the probability of inclusion of a reference; and, the implementation of the model in the remaining records to be screened. For the machine-learning model we arbitrarily used a score of 0.01 (i.e. 1% probability of an article being relevant) to exclude irrelevant records.
Results: From 48 563 records we screened 10 193 in order to create the training set. The predicted accuracy of the model was 87.5.% sensitivity and 92.3% specificity, which left 2983 records to screen from the remaining 38 370.
Conclusions: The application of a machine-learning model substantially decreased the workload associated with the screening of a very large number of records. This approach might be useful when a small loss of relevant studies is acceptable.

19213

When should systematic reviews be replicated, and when is it wasteful? An analysis of reasons for discordance among overlapping systematic reviews

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Background: Replication is a cornerstone of the scientific method. However, unnecessary duplication rather than replication is unethical and a cause of research waste. Moreover, what appear to be duplicate systematic reviews (SRs) often come to different conclusions. Multiple overlapping SRs with not infrequent discordance lead to confusion among users (e.g. patients, healthcare workers, social workers). A better understanding of the reasons

for discord among overlapping SRs may contribute to the development of guidance on when to replicate a SR, and when not to.
Objectives: To develop a checklist to identify reasons for discordance among overlapping SRs.
Methods: Based on a review of the literature and consultation with experts, we developed a checklist of items to understand reasons for discord among overlapping SRs. We tested the feasibility and usefulness of the checklist on several overlapping SRs with discordant results or conclusions.
Results: The checklist itemises components of the objectives, methods for study inclusion, selection of outcomes, data synthesis, reporting and interpretation of findings, which may contribute to discordant findings in overlapping SRs. Information on author discipline and affiliation, conflict of interest, and SR quality was also recorded. The checklist was tested on a diverse selection of discordant reviews in controversial areas including deworming, glucosamine, vitamin D supplementation, payment for environmental services, and pre-school programmes. The most frequent reasons for discord included differences in study eligibility criteria and definition of outcomes, leading to differences in the primary studies being reviewed. We noted several examples where review conclusions supported possible bias related to reviewer conflict of interest.
Conclusions: The checklist for discordant SRs is a useful tool for explaining discordant findings among overlapping SRs. Development of this tool is part of a larger project to establish guidance on when replication of SRs may be useful, and when it would be wasteful. This work aims to support reliance on high-quality SRs rather than low-quality duplication.

19215
Integrating different forms of research evidence into the intervention systematic review: what additional knowledge can be ascertained?

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Background: With disability often investigated as a social construct and a greater emphasis being put on a participant's voice and lived experience, the traditional systematic review (SR) may not be best suited in terms of utility and impact at a programmatic level to a disability-focused international non-governmental organisation (NGO). This presentation describes and discusses methods used by Sightsavers to integrate different forms of evidence into an existing traditional intervention SR (Tripney et al. 2015) via a supplementary SR.
Objectives:1.To address the same research questions by reviewing literature excluded from the original SR on methodological grounds. 2. To understand the added value of integrating research evidence for Sightsavers.
Methods: A brief screening questionnaire was developed followed by a critical appraisal performed on the original review (SURE tool). A critical-appraisal process was developed to assess the relevance, validity and bias in the included research studies. Information was extracted from eligible publications through a specially developed data-extraction form that covered sample and participant characteristics, intervention type, substantive and descriptive study features, and findings and author recommendations. Data were collated for analysis, which took a narrative approach.
Results: Twelve studies were finally added in the supplementary review. Their findings include: - a need to establish, extend and deepen processes of shared learning in order to demonstrate best practice when implementing interventions; - a widespread need for central co-ordination of resources and information in order to refine practice, target resources and jump-start strategic programmes; and, - that people with disabilities should be central to the design and implementation of interventions.
Conclusions: The additional 12 studies provided limited information to answer the original questions; they largely provided supporting information regarding the intervention or the context. The inclusion of different types of research evidence allowed for greater integration of reflexive accounts of research contexts.

19283
The role of reviewer reflexivity: reflections from a mixed-method consultative systematic review

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Background: Qualitative evidence syntheses (QES) use systematic methods to seek out and make sense of qualitative research findings, including people's accounts of their views and experiences. They can help us understand health conditions, health behaviours and interventions from the perspectives of people such as patients and carers. The concepts used in peoples' accounts of their lives, however, are hugely varied and not always well defined. The same is true for the concepts that are presented as findings in qualitative studies. QES therefore requires reviewers to interpret primary research studies. This interpretation, it is argued, is potentially influenced by reviewers' own experiences and views, so researcher backgrounds can potentially influence the shape and content of QES findings. Qualitative researchers often aim to explore the perspectives that they bring to their work and consider the influence their perspectives might have on their research - a process that is termed 'reflexivity' - but accounts of reflexivity in systematic reviews are scarce.
Objectives: To explore the potential value and feasibility of reflexive practice within a mixed-method systematic review that also involves consultations with patient groups and clinicians.
Methods: Members of our review team considered the arguments for reflexivity in its various forms. Using research diaries and team meetings we captured our ideas about the perspectives that were brought to several stages in our review, including our consultations with stakeholders. We reflected on the time and other resources required to make these reflexivity discussions and activities feasible and useful. Results and
Conclusions: We present an overview of the main points in our review at which reflexivity was found to be useful and/or a challenge and the possible value of reflexivity for other review teams.

19351

A database to record the impact of fraud and misconduct in studies included in systematic reviews

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Background: Primary studies, including clinical trials, can be retracted or corrected due to the identification of fraud, misconduct or mistakes caused by honest error. It is therefore important to have a process for identifying these post-publication changes in the source literature and then taking appropriate action, so that the systematic review reflects the status of the current literature.
Objectives: To identify the most appropriate actions required when fraud or misconduct are identified in studies included in a Cochrane Review (CR).
Methods: We recently set up a database and have started to collect the details of cases of scientific fraud and misconduct that have been brought to the attention of the Cochrane Editorial Unit. We recorded how the fraud/misconduct was identified, which details were added to the Cochrane Register of Studies (CRS), and what action was taken to update the CR.
Results: Action in response to cases of scientific fraud/misconduct was generally taken after the publication of a retraction notice. It remains a challenge to identify post-publication changes, especially corrections and expressions of concern. The database of previous cases has been used to draft a Cochrane policy on fraud and misconduct, which will provide consistent processes for dealing with instances of fraud/misconduct in the future.
Conclusions: The establishment of a database of cases of scientific fraud/misconduct has been instrumental to the drafting of a Cochrane policy on dealing with scientific fraud and misconduct. The policy will standardise the decisions that need to be taken when fraud or misconduct is confirmed or suspected in studies included in Cochrane Reviews. Future work will include establishing a defined process for identifying and recording post-publication changes to studies, and will aim to establish the steps that can be taken to identify doubtful studies before their inclusion in a CR.

18030
Providing public access to health evidence through Wikipedia

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Background: Wikipedia is a popular, collaboratively edited web encyclopaedia. Critics have pointed to risks of misinformation due to poor quality and relevance of sources. We initiated a project where health evidence from SBU's systematic reviews is used on Swedish Wikipedia.
Objectives: To quantify the access to evidence from SBU's systematic reviews when quoted on Swedish Wikipedia by SBU staff and a Wikipedian-in-Residence (WIR).
Methods: We held two 3-hour workshops, where a total of 16 staff members were trained in editing and writing Swedish Wikipedia articles. Tailored instructions for participants had been developed by the WIR, who also contributed to articles during a 2-week residency. Participants chose topics freely based on professional interest and perceived need for evidence. Access to the resulting articles was monitored in two ways: 1) total number of page views for each Wikipedia article, calculated by Wikimedia Tool Labs; and, 2) number of visits to SBU's website directly from any Wikipedia article from 1 January to 31 December 2016, calculated by Google Analytics.
Results: A total of 26 articles on Swedish Wikipedia were edited or written by SBU staff or WIR in 2016, based on current SBU reviews. Of these 26 articles, 19 (73%) were already started and 7 (27%) were added by us. No article previously referred to SBU reviews. The number of page views per Wikipedia article varied greatly across topics, from 4 to 134 546. The total number of page views for all 26 articles in 2016 was 404 052, and for the 7 new Wikipedia articles 5699. For the 19 pre-existing articles, these numbers include the entire year regardless of date for SBU's contribution. Linkage from Wikipedia generated a total of 1255 visits to SBU's website in 2016, of which 932 visits (74%) were from new IP addresses not previously recorded to access SBU's website.
Conclusions: Health and medical evidence from systematic reviews may be viewed frequently when quoted on Wikipedia, altough the number of page views varies greatly between topics. Wikipedia articles may provide easy access to health evidence, and including links may generate visits to the source.

18271
Classification of consistency across guidelines: A model for informing patients about global guidance

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Background: Many decision aids convey the relevant facts and evidence but do not convey recommendations from guidelines. It is unclear if conveying recommendations from a global view across guidelines would be similar or dissimilar than what would be conveyed by a single guideline. Conveying a global view for rapid simple patient understanding could quickly become unwieldy.
Objectives: We developed a simple model to report the consistency or inconsistency across guidelines for specific recommendations.
Methods: The Healthcare Guidance for Patients Society (Healthcare GPS) is a group of experts covering the spectrum of developing, rating, and using guidance and shared decision making. We considered the National

Academy of Medicine (NAM), Guidelines International Network (G-I-N), and Grading of Recommendations Assessment, Development and Evaluation (GRADE) standards and developed (via a consensus-based approach) a classification system for a recommendation that is represented across multiple entities making recommendations for the same concept.
Results: First the consistency across the guidelines is determined regarding whether all guidelines are for (or against) the particular recommendation. For recommendations that are consistent in direction across guidelines, consistency is checked regarding the certainty that desirable consequences outweigh undesirable consequences. Further checking for consistently strong recommendations involves confirmation of a qualified rationale requiring three elements: a systematic review, multidisciplinary input with conflict of interest management, and explicit reporting of values and preferences to inform judgments about the balance between benefits and harms of treatment alternatives.
Conclusions: Healthcare GPS ratings can provide a simple recognisable method to communicate the comprehensive view to the certainty of a recommendation across guidelines. Such communication can be tested in patient decision aids and shared decision-making tools to determine if it facilitates patient understanding. This approach can also be tested in areas of clinical decision making and policy decision making.

Attachments: Figure for HGPS recommendation classification.pdf

18383

Presenting summary information from Cochrane systematic reviews: randomised-controlled trial of infographics vs. standard text-based summaries

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Background: Consumers often have problems understanding the standard presentation of research findings. Cochrane is engaged in developing infographics to complement plain-language summaries (PLS) and scientific abstracts of systematic reviews.
Objectives: To test the effectiveness of infographics in the understanding of health information to lay and professional populations in comparison to PLS and scientific abstracts.
Methods: We conducted three randomised trials, with university students, consumers and physicians, to examine the effect of different summary formats of a Cochrane systematic review summary on understanding of health information, reading experience and perceived user-friendliness. In the trials involving students and physicians, we compared infographics with PLS and scientific abstracts.
Results: In the student sample, the group that read the scientific summary had the lowest scores on all measures, with no difference between PLS and infographics groups (Table 1). Similarly, no difference was found in comprehension test scores between PLS and infographics in the consumer sample, although infographic was superior to PLS in terms of reading experience and user-friendliness (Table 1). In the physicians' sample, no difference in understanding was found between the three formats (Table 1). Physicians had better understanding than the other two groups for PLS and scientific abstract, and rated reading experience and user-friendliness of scientific abstracts higher than students (Table 1).
Conclusions: Although the infographic format was perceived as more enjoyable for reading and more user-friendly, we found no evidence that it was better in information transfer than traditional PLS for non-professional populations. Health professionals were able to understand all summary formats equally

Attachments: Supplement.pdf

18414

Developing and testing a 'one-stop shop' for policy-relevant systematic reviews about social policies and systems

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Background and objectives: Government policy makers and social system stakeholders (e.g. citizens, practitioners) seeking information about how to get the right mix of social programmes and services to the citizens who need them are not well supported by existing resources that enable them to: 1) find the best available synthesised research evidence using a taxonomy of topics they understand; 2) reassure themselves that they have conducted a comprehensive search of the full range of evidence that is relevant to them; and, 3) quickly zero-in on decision-relevant information. To address these challenges, we aimed to develop and test an approach to build and continuously update a comprehensive 'one-stop shop' for pre-appraised, synthesised research evidence about social systems.
Methods: We iteratively developed and tested a taxonomy of social system government sectors (e.g. education) and programme areas (e.g. community services) by drawing on existing categorisation schemes, conducting more than 20 key-informant interviews, and by applying the taxonomy to bundles of reviews. We tested search strategies in databases that index social sciences literature (e.g. EBSCO, IPSA, JSTOR, ProQuest and Web of Science), as well as hand searching the websites of organisations known to publish reviews in this broad domain. We also developed and tested an approach to add value to content by highlighting decision-relevant information such as review quality and country focus.
Results: We have now established the feasibility of our approach to developing and maintaining a comprehensive and continuously updated 'one-stop shop' for pre-appraised synthesised research evidence about social systems. We will soon complete our analysis of the distribution of systematic reviews by taxonomy category, review quality, and country focus, among other variables, both currently and as trends over time.
Conclusions: A 'one-stop shop' now exists to support government policy makers and social-system stakeholders.

18723
Evidence gap maps: a tool for promoting evidence and gaps in low- and middle-income countries

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Background: High-quality evidence is essential to inform international development programmes. Despite this, evidence of what works for development in low-and-middle income countries is relatively scarce. To address this, Sightsavers are developing evidence gap maps (EGMs) using the International Initiative for Impact Evaluation methodology. EGMs summarise, appraise and present evidence from systematic reviews in a user-friendly, visual format. This presentation will focus on the benefits and methods used to construct three EGMs developed by us to date.
Methods: Following a comprehensive search of the literature, we sifted, and extracted data from all relevant reviews. Critical appraisal was conducted by two independent reviewers using the Supported Use of Research Evidence checklist. A summary of quality assessment was shared with the authors for comment. The tool gives reviews an overall rating of high, medium or low confidence based on the methodological quality assessment. This is indicated on the EGM using a traffic light system; green, orange and red bubbles represent high, medium and low levels of confidence in the review conclusions respectively. Each review was represented by a coloured bubble and placed in the cell corresponding to the relevant intervention along the x-axis and the strength of evidence along the y-axis. Evidence of each review was categorised as strong, inconclusive or weak based on the findings and conclusions reported by review authors.
Conclusions: EGMs help to identify methodological strengths and weaknesses of existing reviews. They encourage more systematic approaches to synthesise evidence, identify thematic areas where few/no reviews are available and suggest questions for future systematic reviews. The process of developing EGMs is dependent on

the number, thematic focus and quality of systematic reviews available.

18815
Readability of different formats of information about Cochrane systematic reviews: a cross-sectional study

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Background: Health literacy is considered to be an important predictor of health status. The Cochrane Collaboration uses different forms of presenting summary information from systematic reviews to different audiences, including press releases, scientific abstracts, plain-language summaries (PLS) and Cochrane Clinical Answers (CCA).
Objectives: We compared the readability of different formats of Cochrane systematic-review summaries and of PLS written in different languages.
Methods: We retrieved all 164 press releases on Cochrane systematic reviews published by January 2016 and corresponding scientific abstracts, CCA and PLS in English, French, German and Croatian. SMOG index and characteristics of the text were measured using an online program https://readable.io/; SMOG index for Croatian was calculated using an adapted formula.
Results: CCA was the shortest and scientific abstracts the longest format for presenting summary information from Cochrane systematic reviews (Table 1). Press releases had the longest sentences compared to all other formats (Table 1). All formats had a high SMOG index, meaning that all formats required more than 14 years of education to be easily understandable. The SMOG index for PLS was significantly lower than for other formats (Table 1). German PLS translations had significantly more sentences that other translations, and French PLS had the longest sentences (Table 1). The SMOG index for French PLS was significantly higher than for German and Croatian PLS, with Croatian PLS having the lowest SMOG index among all PLS (Table 1).
Conclusions: Summary information formats for Cochrane systematic reviews have low readability, including the formats directed to the lay public in different languages. A systematic approach to the content and format is needed to ensure that they are suitable for the target audiences. We are currently assessing the relevance of the tone and sentiment of different formats to better understand affective states, social tendencies, and language-style cues of Cochrane information materials.

Attachments: Karacic et al Table 1.pdf

19102
Finding and sharing the crime-reduction evidence base: the development and delivery of the Crime Reduction Toolkit

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Background: The UK's College of Policing is part of a government-initiated network of independent What Works Centres, which aim to improve the use of high-quality evidence in policy and practitioner decision making. The College of Policing (with the Economic and Social Research Council), co-funded an ambitious programme of work with a consortium of UK universities, led by University College London, to identify all systematic reviews with a crime-reduction focus. The systematic reviews were quality assessed and information was extracted using a framework developed by the academics focusing on the effect, mechanism, moderator, implementation and economic cost (EMMIE) of the intervention under review. The College, using the EMMIE framework, created the

first crime-reduction focused online tool allowing users to access and use the best-available research in their endeavours to reduce crime. Objective: This presentation will introduce the audience to the Crime Reduction Toolkit and will describe the ways in which users' voices, from across the crime-reduction sector, were incorporated into the design and functionality of the Tool. It will include the opportunity to discuss and consider some of the challenges faced by the development team in: • balancing accuracy of research findings with user requests for simplicity; • meeting the needs of diverse groups of users from charity workers to police and politicians; • testing the Toolkit; and, • helping people to use the Toolkit in operational work and decision making.

19137

A practical guide to expand integrated paediatric primary care: the PACK Child development process

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Background: With revolutionary strategies like the World Health Organization's Integrated Management of Childhood Illness (IMCI) and the advent of interventions like the rotavirus and pneumococcal vaccines, the burden of childhood disease is shifting with mortality from infectious causes declining. This prompts the need to focus on other contributors to childhood morbidity and mortality like long-term health conditions, along with the need for improved integration of curative and preventive services that consider the well child. Furthermore, with the existing emphasis on the child under five, space exists to address the older child.
Objectives: In response to evolving child health needs, the Knowledge Translation Unit (KTU) set out to develop a comprehensive guide to expand integrated paediatric primary care.
Methods: Overseen by a Guideline Development Advisory Group and with the aid of independent funding and policy-maker support, the KTU spent 2 years developing PACK Child. Initial draft clinical content was constructed using international guidelines and synthesised evidence products, which was then adapted to reflect local policies as well as medication and resource limitations. It then endured rigorous iterations of multidisciplinary consultation, piloting, expanding and refining in order to finalise and integrate the content.
Results: PACK Child is a 136-page, evidence-informed, policy-aligned guide, for use during a primary care consultation with a child aged 0-13 years. Using simple features, like red boxes indicating urgency, easy-to-follow algorithms and a standardised format, it provides a practical approach to 63 symptoms and 16 priority, long-term health conditions and integrates routine care into every visit.
Conclusions: The PACK Child guide development process has not only resulted in a comprehensive, integrated guide that addresses changing child health needs, but has also led to several health systems improvements like clarification of prescriber levels, scope of practice and referral pathways, and improving access to medication.

19271

Screening for Chlamydia trachomatis: A policy brief

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Background: Chlamydia trachomatis (CT) infection is recognised as a public health issue. It is the first cause of curable Sexually Transmitted Disease in men and the second in women. Generally, it presents as an asymptomatic infection but, in some cases, can evolve to Pelvic Inflammatory Disease (PID) in women and epididymitis/prostatitis in men, with consequences for fertility in both sexes. Several diagnostic techniques are available, however, in Colombia there is not a policy regarding CT screening.
Objectives: To perform a synthesis of evidence for policy concerning the methods of screening for CT infection.

Methods: The evidence synthesis took into consideration the procedures stated in the SUPPORT tool proposed by the Evidence informed policy network (EVIPNET). Four screening alternatives for CT infection were assessed: no screening, population-based screening, risk group-based screening and opportunistic screening. Systematic reviews and meta-analysis (SR-MA) were retrieved as the main sources of information. Other analysis (costs, social perception and equity) were based on economic evaluations, observational or qualitative studies. All the study searches followed a systematic method. Quality of studies was assessed by AMSTAR for SR-MA and QHES for economic studies. Data extraction included details of the alternatives, information about benefits, potential risks and harms, cost-effectiveness, uncertainties, monitoring, and the perception of social groups.
Results: No health benefits were identified from not screening patients. Home testing represented a good alternative for population-based screening (patients between 18 and 35 years old). Risk group-based screening (women below 25 years old, pregnant women, sexual workers, men and men who have sex with men) has limited evidence, but screening young women was found to be useful to reduce the incidence of PID. Opportunistic screening was not a cost-effective alternative.
Conclusions: Methodologies to provide information on alternatives for health policies are valuable in the process of decision making. This information is intended to aid policy development for CT in Colombia.

Process and lessons learned during priority setting in three countries in Africa

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Background: Within the Cochrane Africa Network (CAN), stakeholder-driven priority setting informs the conduct of relevant reviews to inform local policy and practice. It also ensures efficient use of resources to address relevant health care issues. Although there is no gold standard, there are common principles about what constitutes good practice in setting priorities.
Objectives: To describe priority setting approaches taken and lessons learned across three countries in the CAN.
Methods: We conducted tailored priority setting in three African sub-regions (West, Francophone and Southern-Eastern Africa) through adapting recognised principles of successful priority setting: i) use of an explicit process, ii) stakeholder engagement, iii) information management, iv) consideration of values and context, and v) having in place mechanisms for reviewing decisions.
Results: West African Hub: Delphi-like approach with stakeholder engagement. Process involved identifying national priority health problems, searching online database, conducting a gap analysis of the outputs, nominating potential review topics and ranking the topics using pre-determined criteria. Francophone Hub: Door-to-door priority setting with Ministry of Health staff supplemented with systematic review workshops with researchers and key stakeholders meetings. South Eastern Hub: Identifying relevant decision makers, engagement with professional society, hosting workshops to define key priorities, conduct evidence mapping and identify systematic reviews topics Lessons learned: Stakeholder involvement essential but may miss emerging priorities. Door-to-door priority setting is very effective and should be encouraged although requires enormous resources. Important to identify appropriate policy opportunities.
Conclusions: A regional collaborative group can facilitate reflections of process and lessons learned. Priority setting is an iterative process, with issues emerging over time, each sub-region using different methods to elicit priorities. We learned that emerging priorities may be missed, face-to-face contact and follow up after engagement is important and language can be a barrier.

Attachments: GES_Abstract__CAN_table_Effa.pdf

Short oral session 8: Priority setting for evidence production, synthesis and use

Costs of randomised-controlled trials – a systematic review and empirical case series

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Background: High-quality evidence from randomised-controlled trials (RCTs) comes at high cost. In the resource-restrained academic setting, thoughtful allocation of financial resources for an RCT is a crucial task. However, empirical evidence on cost drivers of RCTs in different disciplines and settings is sparse.
Objectives: To: (1) systematically review the existing evidence on resource use and associated cost of RCTs; and, (2) to retrospectively determine the resource use and costs of completed RCTs in Switzerland and internationally.
Methods: First, we systematically searched the literature on empirical cost data of RCTs (MEDLINE/EMBASE/EconLit). Second, using a previously compiled and validated standardised list of direct and indirect cost items associated with all phases (planning, conduct, etc.) of RCTs, we retrospectively recorded the resource use of academic RCTs conducted within our network. We further contacted pharmaceutical companies for cost data on RCTs conducted in Switzerland. Resources included human resources and fixed-cost items, materials, or services. Costs were calculated using unit costs for fixed-cost items and the applicable salary rates for human resources. In addition, we received resource and cost data from 12 completed RCTs of the Swiss Group for Clinical Cancer Research (SAKK).
Results: The systematic review showed that detailed empirical data on resource use and costs of RCTs are not available. At the Summit we will present a detailed cost analysis including the main cost drivers of 17 academic RCTs predominantly conducted in Switzerland, stratified by disease area. No pharmaceutical company provided detailed cost data on their RCTs conducted in Switzerland.
Conclusions: To our knowledge this is the first study to empirically investigate the resource use and associated costs of RCTs. The results will identify suitable lever-points to reduce RCT costs, inform effective cost monitoring, and support efficient allocation of scarce resources in order to reduce waste in clinical research.

18347
Cochrane Clinical Answers – content expansion priorities and subject coverage

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Background: Cochrane Clinical Answers (CCAs; www.cochraneclinicalanswers.com) aim to place the results of Cochrane Reviews (CRs) within the context of current clinical practice and, in doing so, increase the usage of CRs to inform healthcare decisions. With over 7000 CRs on the CDSR, and up to 80 new and updated reviews published every month, prioritising is an essential part of the CCA production process.
Objectives: To describe the criteria used to select CRs for CCA production.
Methods: The CCA team developed a selection strategy based on criteria relating to the relevance and generalisability of the clinical question, the currency of the CR, the volume of evidence, and, sometimes, the analysis used.
Results: We will detail the selection criteria used by the CCA editors, along with the justification for those choices. Our selection criteria favours recent CRs with larger population sizes; hence larger, higher-producing CRGs and disease areas with larger trials. Conclusion: Selecting CRs on which to base CCAs is a challenge. We aim to provide CCAs for those CRs that are likely to have high usage, and where interpretation of the evidence could be most beneficial for clinicians and other healthcare professionals, who are expected to make decisions at the point-of-

care.

18590

Academic response to the 'Increasing value, reducing waste' discussion: Swiss national consensus on a quality framework for clinical research

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Background: A 2014 Lancet series suggested that 85% of biomedical research is avoidably wasted. So far, academic institutions have paid little attention to the recommendations on how to increase value and reduce waste.
Objectives: To develop a conceptual framework guiding the comprehensive assessment of clinical research quality at academic institutions, and Swiss university hospitals in particular.
Methods: We systematically, and in duplicate, searched definitions and concepts of clinical research quality on websites of international stakeholders and in MEDLINE up to February 2015. Stakeholders included governmental bodies, regulatory agencies, the pharmaceutical industry, academic research initiatives, contract research organisations, ethics committees, patient organisations and funding agencies from 12 countries. Using qualitative-framework analysis, we systematically developed a comprehensive framework for clinical research quality. In a Delphi process, a framework draft was circulated among representatives of the 8 international stakeholder groups and all 6 Swiss Clinical Trial Units, until consensus on structure and content was reached.
Results: Our proposed framework synthesises criteria that were identified from different stakeholders and settings, and spans 5 study stages. It includes the following dimensions: (1) ethical conduct and protection of participants' safety and rights; (2) relevance and patient centredness; (3) minimisation of bias/internal validity; (4) precision; (5) transparency/public access to data; and, (6) generalisability of study results. These dimensions are embedded in an environment that a) consists of an established infrastructure including well-trained personnel and functional facilities; and, b) uses ongoing research efficiently for training purposes to ensure sustainability of an effective infrastructure. Each dimension contains main quality questions and explanatory items guiding the quality assessment of each study stage.
Conclusions: We propose a consensus-based framework guiding the assessment of quality of clinical research, which aims to increase value at Swiss university hospitals.

18843

Specify your research needs; the FIT tool for determining the nature of knowledge gaps in guidelines

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Background: Together with healthcare professionals, the Dutch National Health Care Institute (NHCI) recently updated the Dutch Guide to Guidelines. In its recent version it is stressed that knowledge gaps that result from a lack of evidence should be specified in the guideline in order to stimulate research. Besides its role in guideline development, the NHCI also assesses evidence for the purpose of reimbursement decisions. Tool: In the context of its reimbursement decisions the NHCI developed the FIT tool (Feasible Information Trajectory). This tool helps to identify evidence (knowledge) gaps and gives insights in how these gaps can be filled, if at all. FIT is a

computerised tool that starts with several PICO(ts)-related questions and reveals feasible research characteristics from the answers to these questions. It then contrasts the feasible characteristics with the characteristics of the research in the available evidence and visually shows the knowledge gaps as the discrepancy between feasible and available research. Discussion: Although developed in the context of reimbursement decisions, guideline developers may also want to apply the FIT tool for determining knowledge gaps. Through application of the FIT tool they specify their exact research needs and by doing so they may provide a major impulse to more targeted research initiatives when researchers take up the challenge of providing the necessary research to fill in existing knowledge gaps.

19192

A large-scale comparison between the global conduct of randomised-controlled trials and the global burden of diseases

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Background: Concerns exist about whether the allocation of resources in health research is aligned with public health needs, in particular in low-resource settings.
Objectives: We aimed to evaluate the alignment between the effort of health research through the conduct of randomised-controlled trials (RCTs) and health needs attributable to the burden of diseases for all regions and all diseases.
Methods: We grouped countries into 7 epidemiological regions and diseases in 27 groups. We mapped all RCTs registered at the International Clinical Trials Registry Platform started in 2006-2015 to each region and group of diseases. We mapped the burden in 2005 as disability-adjusted life years (DALYs) based on the Global Burden of Diseases 2010 study. Within regions, we identified local research gaps, i.e. groups of diseases for which there is little research as compared to the local burden.
Results: We mapped 117 180 RCTs and 220 million DALYs. In high-income vs. non high-income countries, 130.9 vs. 6.9 RCTs per million DALYs were conducted. We did not identify local research gaps in high-income countries. In sub-Saharan Africa, South Asia and Eastern Europe and Central Asia, we identified local research gaps for the respective major cause of local burden. There were no local research gaps in sub-Saharan Africa for Malaria and HIV, which were the second and third highest causes of burden. We identified few local research gaps in other regions.
Conclusions: Most RCTs were conducted in high-income countries, and their share across groups of diseases was aligned with the burden of those countries. Despite an overall low number of RCTs in non high-income regions, the local research effort was generally aligned with the regional burden except for some major causes of burden.

19198

Funding characteristics of randomised clinical trials supported by the main public funding body in Switzerland: a retrospective cohort study

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Background: The Swiss National Science Foundation (SNSF) is the main public funding body for basic and clinical research in Switzerland. Results from a retrospective cohort study including 101 SNSF-supported randomised clinical trials (RCTs) showed that 40% were not published in peer-reviewed journals. Funding characteristics (e.g. total trial costs, funding per participant, additional funding sources) of SNSF-supported RCTs have not been investigated before.
Objectives: To assess the funding characteristics of RCTs supported by the SNSF until 2015 and to compare results to those from a similar UK study.
Methods: We established a retrospective cohort of SNSF-supported RCTs for which recruitment and funding had ended in 2015 or earlier. For each RCT, two investigators independently searched corresponding publications in electronic databases and trial registries. We asked all principal investigators in an online survey for information about funding characteristics and completion/publication status. Teams of two investigators independently extracted details from the original SNSF proposal and, if available, from trial registries or publications.
Results: We included 101 SNSF-supported RCTs between 1986 and 2015. Most were single-centre RCTs with median study size of 138 (interquartile range [IQR], 76-400). Sixty-seven principal investigators (67%) responded to our survey. On average, investigator-initiated RCTs received $220,000 (≙CHF 222,000) from the SNSF, covering 67% of the total trial costs. Most investigators (70%) mentioned additional funding, mainly from own institution or private foundations. Median total costs of an SNSF-supported RCT were $426,000 (IQR, $280,000-$892,000). Funding characteristics were similar to a study from the UK (McDonald et al.; Trials. 2006). More than $12 million (i.e. 49% of RCT budget spent by SNSF until 2015) was granted to RCTs that were never published. Conclusion: To avoid waste of public resources for health research, public funders could promote publication of RCTs and improve funding schemes for investigator-initiated RCTs. A new SNSF funding track aims to address this issue, but needs to be evaluated.

19277
Evidence-informed decision making for life-saving commodities investments in Malawi

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Background: During the last 15 years, Malawi has made remarkable progress in reducing child mortality; however, maternal and newborn mortality remains persistently high.To help address these entrenched challenges, the Reproductive, Maternal, Newborn and Child Health (RMNCH) Trust Fund provided short-term, catalytic financing of $11.5 million (2013-2015) to support country plans to advance the RMNCH and commodity agenda.
Objectives: To document how Malawi (ministries, partners, working groups) used evidence to inform decision making and RMNCH investments; 2) to identify barriers to utilising information and evidence in the planning and prioritisation process at national and sub-national levels; and, 3) to assess the utility of the RMNCH Landscape Synthesis, which uses existing information to review life-saving RMNCH commodities and services.
Methods: A qualitative case study utilising a rapid-appraisal approach, where semi-structured interviews were conducted with staff members from UN agencies, development partners and the Ministry of Health (MoH) at national and district level. The analysis enlists a framework approach for manual qualitative-content analysis.
Results: Led by the MoH, the RMNCH Trust Fund proposal utilised an evidence-based and equity-focused process for prioritisation of investments. Data-informed decision making permeates similar commodity-focused working groups. However, common health information system (HIS) weaknesses, such as data quality and timeliness, persist and are more prevalent at district level. The collation of evidence in the RMNCH Landscape Synthesis was a useful and sustainable tool to support planning.
Conclusions: The evidence-based, equity-focused decision-making process for the RMNCH Trust Fund proposal provides an effective model for inter-agency investment prioritisation. Strengthening data-informed decision making will require financial and political commitments to HIS and capacity building for data use, particularly at the district level. New initiatives (e.g. Health Data Collaborative and Quality of Care Network) provide

opportunities to further improve evidence-informed decision making.

Short oral session 9: Guideline development B

17994

Collaboration in guideline development: European Respiratory Society and National Institute for Health and Care Excellence Fellowships in Guideline Methodology

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Background: As the need for evidence-based guidelines following strict methodological standards is increasing, there is a corresponding need to increase the European Respiratory Society's (ERS) methodological capacity.
Objectives: To establish a Fellowship in Guideline Methodology in collaboration with authoritative international organisations.
Methods: The fellowship is divided into two parts: • Training in systematic reviews in a specialised centre. • Work placement in a large guideline-development body that will give the fellow the unique opportunity to observe and take part in different stages of guideline development. The fellow observes/participates in most steps of guideline development as well as participating in different committee meetings and discussions. They also undertake a short project of their own interest. Cochrane was chosen for the systematic review training as it produces high-quality systematic reviews of global impact and leads in methodological development. Following a systematic and transparent process, the UK National Institute for Health and Care Excellence (NICE) was chosen for the work placement as it is a world-recognised organisation for developing clinical guidelines.
Results: Two fellows per year are appointed via application and interview, from scientists and clinicians who have an interest in guideline-development methodology. Two fellows completed the scheme in 2016 and two fellows have been appointed for 2017. Throughout the fellowship, they are supervised by staff from Cochrane, NICE and the ERS methodologist.
Conclusions: Benefits for the ERS are the rigorous training of methodologists who will then contribute to ERS guideline development. NICE has the opportunity to consolidate links with the ERS, the leading professional organisation in its field in Europe.

18442

Use of mathematical modelling in WHO guidelines

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Background: The results of mathematical modelling (MM) are used in different ways when formulating clinical or public health guidelines. There is no standardised approach to the incorporation of MM into guideline development.
Objectives: To describe the uses of MM in World Health Organization (WHO) guidelines and to provide guidance on if, when and how to use MM optimally in public health guidelines.
Methods: We reviewed all guidelines approved by the WHO Guidelines Review Committee 2007-2016 and recorded all instances that mentioned MM. We extracted the following data from each guideline: the questions that MM addressed; whether and how MM influenced the recommendation; if a de novo MM was developed and, if so, the model details. We used descriptive statistics to synthesise the data.
Results: There were 188 guidelines, of which 42 referenced MM. Of these, MM directly impacted the

recommendations in 17 and GRADE profiles included MM in 11 guidelines. Preliminary analyses show that MM was used for a variety of types of questions, including risk, prognosis, intervention effectiveness and effect of diagnostic tests on health outcomes, particularly when primary data were sparse or nonexistent, e.g. for emerging diseases; long-term health outcomes; and, where contextual factors such as baseline disease prevalence varied. Guidelines rarely reported an assessment of model quality or why specific models were selected. Models developed de novo did not provide sufficient detail to assess assumptions or parameters and thus model outputs.
Conclusions: MM are frequently used to inform recommendations in WHO guidelines, but reporting of both existing and de novo models is poor. This review contributes to ongoing work at WHO that will provide guidance on when to consider using MM to inform guidelines; how to assess the quality of models; and, how to incorporate the results of MM into a body of evidence.

18492
Patient-relevant context factors in guidelines

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Background: Patient-relevant context factors are of crucial importance in the care of 'real' patients. Guideline groups thus face the challenge of developing patient-centred, not disease-centred, guidelines. In this context, the consideration of patient-relevant context factors is crucial to increase the acceptance of guidelines in clinical practice and may improve the care of 'real' patients.
Objectives: To identify patient-relevant context factors that are crucial for the development of guidelines and to evaluate their consideration in the recommendations of selected guidelines.
Methods: The following patient-relevant context factors were operationalised and further examined on the basis of the classification by Wyatt et al. (3): co- and multi-morbidity, the social and personal context of patients as well as their personal values and preferences. The evaluation was performed on the basis of all guidelines published in 2016 by the German Association of the Scientific Medical Professional Societies (AWMF) as well as guidelines newly published in 2016 by the Scottish Intercollegiate Guidelines Network (SIGN) and the English National Institute for Health and Care Excellence (NICE).
Results: A total of 23 German, 4 Scottish (SIGN) and 28 English (NICE) guidelines were included. Of the context factors investigated, the recommendations in the German guidelines primarily contained statements on co- and multi-morbidity, in which it often remained unclear how the comorbidities mentioned had been selected. The social and personal context of patients, as well as their personal values and preferences, were hardly addressed explicitly in the recommendations, or not addressed at all. The analysis of the SIGN and NICE guidelines is ongoing and these results will also be presented at the Summit.
Conclusions: The first results of our analysis show that those patient-relevant context factors that are highly relevant to patients have so far hardly been evident in the reality of guidelines. It would thus be important to further develop the operationalisation of context factors and increase awareness in guideline groups.

18770
Comparing recommendations in two national guidelines on dementia using the same scientific evidence

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Background: In 2014, the Swedish National Board of Health and Welfare and the Norwegian Directorate of Health started to develop national guidelines on dementia. As the time coincided, collaboration on selected topics was initiated. The central aspect of the collaboration was to develop scientific materials which then could be shared

by the two countries and used by their different working groups for development of recommendations. The recommendations were adapted to the different countries' requirements and needs.
Objectives: The aim was to compare recommendations in two national guidelines on dementia using the same scientific evidence.
Methods: An evidence-based approach which included scoping, development of research questions (PICO-format) and a literature search for systematic reviews was used. The literature was assessed for inclusion and methodological quality by two authors independently. The quality of the evidence was assessed using GRADE. The work was conducted in Norway. There were overlapping recommendations in the area of anti-dementia drugs, psychotropic drugs and psychosocial interventions and for these the systematic scientific background material was shared.
Results: Overall, there is a significant overlap between the recommendations for anti-dementia drugs, psychotropic drugs, and psychosocial interventions, both with respect to strength and direction. However, at a detailed level there are some differences – see Table 1. For psychosocial interventions, Norway and Sweden used different ways of presenting the recommendations, which make direct comparisons difficult.
Conclusions: Using the same scientific background materials for developing recommendations in national guidelines lead, in general, to the same level of recommendations. Some differences in the recommendations for anti-dementia and psychotropic medical treatment were found in areas where the scientific evidence was weaker. In these situations the recommendations were based to a higher degree on the expertise and experience of the members of the working groups.

Attachments: Table 1 abstract GIN.pdf

19048
Evidence, values and context preferences to help mitigate disputes and enhance the applicability of guideline recommendations to practice

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Background: Overlapping systematic reviews (SRs) are increasingly frequent in the medical literature. They can easily originate discordant evidence. Reconciling conflicting evidence is a dimension not sufficiently addressed by guideline-development tools. As part of a wider research project supported by the Italian Ministry of Health, we are carrying out a survey to learn more about discordant SRs and their impact on the development of clinical recommendations (CRs).
Objectives: To identify key dimensions and informational needs that could be useful in dealing with discordant evidence in the context of the guideline decision-making process.
Methods: The survey consists of two parts. In the first one general information about the respondents is collected (ie. age, role, expertise, etc…). In the second one we present 4 GRADE Summary of Findings (SoF) tables summarising the results of 4 overlapping discordant SRs and 10 questions investigating the use of the evidence presented to take a decision about a possible CR. Moving from a real scenario, we explore the information needs when dealing with potential discordant evidence.
Results: The survey was sent to 80 people involved at different levels in the development of CRs. To date it has been completed by the 40% of the contacted people. First results show that the most-wanted information when in the presence of overlapping SRs are (multiple choice possible): Risk of Bias of SRs (69,2%); consistency between studies' results (65,4%); included studies in each SR (61,5%); and, methodological limitations in primary studies (50%). Any response rate above 50% would be considered sufficient for a descriptive study. We will send a maximum of 3 reminders in a 2-month period.

Conclusions: The answers to the survey will help in identifying key dimensions and information needed when in presence of overlapping, discordant SRs. This will be used to develop a new module (Discordant Module) of the GRADE Working Group Guideline Development Tool (GDT - http://gdt.guidelinedevelopment.org) designed to support guideline developers in dealing with overlapping and discordant evidence.

19053

Do the WHO criteria for going from evidence to recommendations need to be modified to better reflect complex multidisciplinary interventions?

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Background: Guidelines of the World Health Organization (WHO) provide recommendations to support policy makers and programme managers in making informed decisions about clinical practice or public health issues. The factors determining direction and strength of a recommendation are laid out in an evidence to decision (EtD) framework and include quality of evidence, balance of benefits & harms, equity & human rights etc. Shortcomings in the current framework include a potentially limited applicability to complex interventions, unclear and potentially missing criteria, and the lack of an explicit theoretical foundation.
Objectives: This research project aims to systematically review existing EtD frameworks for health as well as decision criteria towards the development of a stronger conceptual framework to underpin the WHO decision criteria.
Methods: Alternative EtD frameworks for health were identified through a systematic forward and backward citation search. The frameworks were assessed against practical (e.g. ease of use, non-redundancy) and legitimacy (e.g. reflection of WHO norms and values, rigour of the development process) considerations. Decision criteria were identified through a systematic search for reviews reporting on such criteria. Screening and assessment were conducted independently by 2 analysts. WHO's normative principles were extracted from key WHO documents as well as ethics, human rights and sustainability frameworks endorsed by WHO.
Results: We identified 2201 publications on EtD frameworks and included 13 in the assessment. After assessment of 2401 publications, 32 reviews on decision criteria were included and extracted. The best-evaluated framework, DECIDE, was compared against and adapted for WHO purposes according to the normative principles and the identified sets of criteria.
Conclusions: Future steps include key-informant interviews with developers of WHO guidelines, focus group discussions with health decision makers on four continents, and an exploration of how to best populate the criteria with evidence. The final result will be an EtD framework adapted to complex interventions and founded in WHO norms and values.

19248

How are guidelines on topics with little scientific evidence developed and how are decisions made?

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Background: Evidence-based guideline development presumes a foundation of scientific evidence for recommendations. However, there are fields of research that are not particularly suitable to study patients in a

(randomised) controlled setting. For example, fragile patients. In those situations, a guideline can still be developed to help clinicians make informed treatment choices.
Objectives: In this study, we aim to evaluate how guidelines on topics with little evidence are developed, if they include recommendations, and how decisions are made.
Methods: We studied a cohort of clinical guidelines published by NICE (n=182) and the Knowledge Institute of Medical Specialists (n=248). Criteria for inclusion were: the guideline described a subject on fragile patients (children, frail elderly, mentally incompetent patients), life-threatening situations, and low- prevalence diseases (5 per 100.000 patients). Guidelines without GRADE evaluations were excluded. We assessed the grading of literature and, if recommendations were formulated, the strength of the recommendation, and the evidence-to-decision framework.
Results: Out of 330 guidelines 86 fulfilled the inclusion criteria. Evidence was GRADEd low to very low in over 95%. Recommendations were strong 56%, conditional, 26%, or weak 18%. 0% of guidelines made no recommendations because of the lack of evidence. Transparent methods from evidence to decisions were lacking. Factors supporting decisions were experience of care providers, patient perspective, costs, and duration of an action. A framework from evidence to decisions was missing in X% of guidelines.
Conclusions: Evidence in our cohort of guidelines was graded low in most cases, nevertheless the recommendations were frequently strong. Although clinical expertise is part of evidence-based care, it would be useful to have an insight on which considerations the decisions were based. A framework from evidence to decisions, like GRADE proposes, would help to make this process more transparent.

19391
An approach for eliciting utilities for patients' health outcomes with guideline panels

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Background: Consideration of patients' values and preferences is one of the main criteria for formulating guideline recommendations using the GRADE Evidence-to-Decision framework. A systematic review of the literature can provide research evidence to inform a panel's decision making, but information about specific health outcomes is often lacking. Information about utilities provides a measure of the value that patients place on a health outcome. Objective: To describe a survey approach to collect guideline panel members' views and judgements about the utility of health outcomes considered in the development of a guideline.
Methods: In a guideline-development project to develop 10 American Society of Hematology venous thromboembolism guidelines, we conducted a survey of panel members, including patient representatives, to elicit utilities for prioritised health outcomes, in parallel with a systematic review of patients' values and preferences. The online survey consisted of marker states to provide a description of each outcome, including the symptoms, time horizon, testing and treatment, and consequences. Panel members rated the utility of outcomes on a visual-analog scale from 0 (death) to 100 (full health). We summarised the utility ratings across guideline panels and compared them to research findings from the literature.
Results: Eighty-five panel members rated the utilities of 127 outcomes identified as critical or important for decision making in the 10 guidelines. The utilities for the majority of outcomes rated by the panel were not identified in the literature. For those identified in the literature there was overlap between the panels' ratings and ranges described in research studies. The panel's utility rating was used to supplement the research evidence for decision making, particularly when informing various health states of an outcome (e.g. mild, moderate, severe health states).
Conclusions: Utility rating in an online survey using marker-state descriptions and a visual-analog scale can be used as a feasible, structured approach by panels to supplement evidence reported in literature and consider the value placed on health outcomes.

Short oral session 10: Using evidence for decision making

18189

Rapid-review process to identify priorities for updating published guidelines

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Background: Once published, guidelines can become outdated quickly and recommendations require re-evaluation against new evidence to remain valid and safe. SIGN guidelines are reviewed for update 3 years after publication. Scoping and review processes to identify whether new evidence may change existing recommendations can be labour-intensive and time-consuming.
Objectives: We sought to find a method of scoping which would be sufficiently thorough to provide confidence in results without the demands of a full review. We trialled a rapid-review process to provide an overview of new evidence without conducting exhaustive searches.
Methods: A rapid review was piloted with an existing guideline (SIGN 140: Management of primary cutaneous squamous cell carcinoma (SCC) to identify other recent guidelines, technology appraisals or systematic reviews related to the original key questions. Results from the new evidence were compared to the evidence in the guideline to check if further in-depth review was required. The results of the review were summarised and circulated to the SCC guideline development group for consultation and to identify new developments not captured by the original guideline scope.
Results: For SCC a new systematic review reported no new robust evidence or changes in practice. The rapid review was considered to provide adequate information to decide that no changes were needed to the guideline. The rapid review took around 2 days of literature searching and evaluation for a health services researcher, with some input from the guideline's programme manager.
Conclusions: For this topic the rapid review at 3 years was a viable process to provide an objective overview of new evidence without being resource-intensive. Further testing is required for guideline topics which are likely to attract more fast-paced developments and randomised-controlled trials..

18317

Compiling evidence to guide policy decisions on the introduction of the influenza vaccine in Kenya

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Background: The Kenya National Immunization Technical Advisory Group (KENITAG) was established by the Ministry of Health (MoH) to provide recommendations on national vaccine policy. In September 2014 the MoH requested a recommendation from KENITAG regarding introduction of the influenza vaccine into Kenya's national immunization programme.
Objectives: To generate a sufficient body of evidence to guide KENITAG deliberations on the introduction of the influenza vaccine into Kenya's national immunization programme.
Methods: KENITAG members developed a recommendation framework to identify key data elements that would be used to guide the deliberations on introduction of the vaccine. Elements in the recommendation framework covering the aspects of i) the disease ii) vaccine and immunisation characteristics iii) economic and operational considerations and iv) health policy and programmatic issues were ranked as either critical, important or non-critical to the deliberations. Literature searches for Kenyan data on the elements described in the

recommendation framework were undertaken. The quality of identified articles was assessed using the Critical Appraisal Skills Programme (CASP) tool.
Results: Some data were obtained on most of the critical and important elements of the recommendation framework, however, there were significant gaps in knowledge in the national burden of influenza disease, the socio-economic effects of influenza disease and the programmatic requirements of an influenza vaccine programme. By 2016, there was insufficient local data to conclusively finalise KENITAG deliberations on whether to introduce the influenza vaccine into the national immunisation programme.
Conclusions: The use of evidence to guide policy decisions is limited by the availability of good quality local data. Additional data on the burden of influenza in specific age groups, and across different regional areas in the country, the socio-economic impact of the disease and programmatic considerations of a national vaccination program are required to conclude KENITAG deliberations on whether to introduce the influenza vaccine into Kenya's national immunisation programme.

18568
Use of network meta-analyses in WHO guideline recommendations

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Background: Clinical practice guidelines (CPGs) are defined as "statements that include recommendations intended to optimize patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options". Currently, guidelines have increasingly used systematic reviews and meta-analyses of randomised-controlled trials (RCTs) to form the basis of recommendations. Standard meta-analytic techniques can be used if the guideline addresses pairwise comparisons, for example, treatment A versus treatment B. If a guideline is attempting to address the question of which treatment is best among multiple options, however, standard meta-analysis may not be adequate. By contrast, network meta-analysis (NMA), a method that uses information from both direct and indirect comparisons and makes inferences about the comparative effectiveness of all the treatments of interest in a single analysis, is particularly suited in such situations. Although NMA offered several advantages to the process of developing clinical guidelines, only 8% of 138 NICE guidelines had used NMA in 2012. NMA is expected increasingly to use and adapt for develop clinical guidelines in the future.
Objectives: To investigate how many guideline recommendations were based on NMA. And what advantages have been provided for guidelines based-on NMA when compared to pairwise meta-analysis.
Methods: WHO (http://www.who.int/en/) was searched to identify all published CPGs from inception to February, 2017. We collected the general information of included CPGs, recommendations from each guideline, and compared the recommendations with previous one based-on pairwise meta-analysis. Comparison analysis was used to explore the advantages of NMA to form the recommendations. Results and
Conclusions: This study is ongoing and results will be presented at the Summit as available.

Attachments: Use of network meta-analyses in WHO guideline recommendations.pdf

18711
Guidelines – improving quality, or providing care with fewer resources? Or both?

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Background: Guidelines fulfil a number of functions, for example to optimise care, improve quality of care, and reduce unwarranted variation. However in many healthcare systems, guidance on providing quality care with fewer resources – money, time, staff – is needed.
Objectives: • to explore ways guidelines currently support quality care with fewer resources; • to identify guidelines whose primary aim is to 'cost less'; and, • to propose strategies to develop 'cost-saving' recommendations.
Methods: We looked at how guidelines in a national programme currently support the use of fewer resources. We also searched for guidelines whose primary aim is to 'cost less', using the GIN International Guideline Library and the National Guideline Clearinghouse using free-text terms for costs and savings. Finally, we explored how committees can be supported in making 'cost-saving' recommendations.
Results: There are options for making recommendations which 'cost less' These include 'do not do' recommendations and recommendations on how to deliver care efficiently (service delivery). There is also increasing consideration of resource impact to ensure that where more resources are needed to implement recommendations, the evidence warrants this, and this is clearly communicated to guideline users. We identified only 1 guideline that explicitly aimed to save costs. Committees do not make as many negative ('do not do') recommendations as they do positive. Previous work has been presented at GIN on why this might be (such as concerns about evidence needed to support such recommendations). Practical ways to increase negative recommendations could include ensuring that where positive recommendations are made, committees consider actions that can then be stopped, such as medicines, technologies or procedures.
Conclusions: Guidelines that address cost containment or reduction are increasingly seen as key to the sustainability of many healthcare systems. All guidelines should consider if cost containment/reduction is appropriate and, if so, to ensure review questions address this, encourage committees to make recommendations, and make the potential for cost-savings clear.

18730
Tools and resources for a rapid-response service to meet policy makers' urgent needs for evidence

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Background: As the calls for evidence-informed decision and policy making increase, there is an emphasis on the evidence not only being relevant but timely too. And therefore there is a growing interest in rapid-response services which use rapid syntheses of evidence like rapid-response briefs to support decision and policy making. However, there is very minimal experience with this rapid evidence syntheses and scholars have noted that there are no agreed methods or guidance for these kinds of products.
Objectives: Scholars at the Uganda country node of the Regional East African Community Health Policy Initiative (REACH-PI (U)) under the UsEvidence project have developed and piloted methods and tools to prepare rapid-response briefs. The aim of this presentation is to introduce and share tools and resources that a rapid-response service can make use of to support policy making.
Methods: We developed resources and tools through several steps: a) A literature review of available and relevant methods for evidence synthesis; b) brainstorming to contextualise methods from the literature to rapid-response briefs; c) development of a draft resource manual; d) pilot testing these tools and resources in Uganda; and, e) reviewing and updating the draft resource manual to the current version.
Results: The resources and tools have been shared with a few other groups and have been found to be helpful and easy to use. They are undergoing a continuous validation process as they are used by a wider audience.
Conclusions: In a field with very little experience and guidance, we present a set of tools and resources to be used in a rapid-response service to support policy and decision making. Scholars have found these tools to be helpful and easy to use.

18740

Use of evidence from low- to middle-income countries in a national public health guidance programme

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Background: Guidelines use a range of evidence to support recommendations and limitations are often placed on what evidence is relevant and applicable. Limitations are usually defined on the population, intervention, or comparators, but can also include other limitations, such as location or language.
Objectives: • to describe the limitations applied in a national programme of public health (PH) guidance, with a focus on location and language; • to estimate the impact of excluding evidence from low- and middle-income countries (LMIC).
Methods: We did the following: • identified all PH evidence reviews of effectiveness published in 2016; • assessed whether limitations on location or language were applied, and how this was done; and, • searched for relevant systematic reviews focused on LMIC.
Results: In 2016, 6 guidelines were published, including reviews of effectiveness. Of these • most defined some restriction based on location in the protocol; • most did not apply a filter to limit by location at the searching stage, but applied this at sifting and full-text stages; and, • all reported limitation by language (English only). At full-text stage, in total, 16 studies were reported as being excluded on location (n=12) or language (n=4). Of the minority of guidelines that did not restrict on location, in total, only 1 primary study from a LMIC was included. Where limitations were applied, most were based on OECD membership. Of the OECD member countries, only 2 (Mexico and Turkey) are not high-income countries as defined by the WHO. In total, 3 studies from LIMC were therefore included as OECD member countries. These were: • 1 multi-site research study, including 1 site in Mexico; • 1 research study based on the border of Mexico; and, • 1 systematic review, including a study from Turkey. We will also present if systematic reviews using evidence from non-OECD countries could have provided more information.
Conclusions: Systematic reviewers and guideline developers often limit evidence to named countries; this can be justified and appropriate. However, relevant evidence can be excluded and this limitation should be explicitly recognised.

18743

Practitioner research – what is it and how can we use it in evidence reviews and guideline development

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Background: Practitioner research is research designed, undertaken and interpreted by practitioners and professionals, rather than by academics or ‘professional' researchers. It is a research approach often used in areas such as social care. Whilst the use of participatory and user research, and evaluation are now commonly used in evidence reviews, the role of practitioner research is less well understood.
Objectives: • to assess the use of practitioner research in social-care guidelines; and, • to explore the challenges of using practitioner research in systematic reviews and guidelines.
Methods: We assessed all included studies from a sample of social-care guidelines to assess the use of practitioner research as evidence. We used criteria as defined in the SSCR review (1), to assess each included study from the abstract and evidence table. We also explored how practitioner research would be identified, assessed and used in standard evidence review and guideline processes.
Results: We will present an assessment of the use of practitioner research in guidelines. The SSCR review identified a number of challenges with practitioner research; this included the challenges of publishing such research and the types of methods used. In practice, such research is therefore likely to be less represented in

standard databases and may be considered of 'lower quality' when assessed using approaches such as GRADE. We selected a number of studies from the SSCR review and determined if they were indexed in standard databases and quality assessed them using GRADE.
Conclusions: Practitioner research can provide evidence for use in systematic reviews; however, it can be harder to identify and often assessed as low quality. The value of practitioner research may be of particular relevance when considering contextual and implementation issues, and barriers to service change. 1. Practitioner research in social care: a review and recommendations. Ian Shaw, Neil Lunt and Fiona Mitchell. School for Social Care Research; Methods Review 18, 2016

18935
GRADE guidance for rating the certainty of a body of evidence describing the relative importance of outcomes or values and preferences

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Background: The GRADE working group defines patient values and preferences as how patients value the relative importance of the main health outcomes. Although the GRADE working group has developed approaches to rating certainty of evidence treatment, diagnosis, resource and prognosis questions, guidance for assessing evidence regarding values and preferences thus far has been lacking.
Objectives: To provide guidance on how users can assess the certainty of evidence regarding importance of outcomes.
Methods: We applied the GRADE domains to rate several systematic reviews addressing importance of outcomes, conducted consensus meetings, and consulted stakeholders in the GRADE working group for feedback.
Results: A body of evidence addressing the importance of outcomes starts at 'high certainty'. Risk of bias, indirectness, inconsistency, imprecision and publication bias can lead to rating down this evidence. For risk-of-bias assessment, we propose subdomains of the selection of the study population, missing data, type of measurement tool, and confounding. We have also developed corresponding items for each subdomain. The population, intervention, comparison and outcome (PICO) elements of the rated evidence and methodological aspects determine the degree of indirectness. Inconsistency about typical values is generally due to PICO and methodological elements that should be explored and, if possible, like for other types of evidence, explained. The width of the confidence interval and sample size should inform judgments about imprecision. We also provide suggestions on how to detect publication bias based on empirical information. We also suggest within-study variability as a separate issue to the certainty of the evidence about typical values.
Conclusions: We have developed GRADE guidance for rating the certainty of evidence on how patients value health outcomes. This guidance will be helpful to systematic reviewers and decision makers, including guideline developers.

Attachments: GRADE assessment.png

19083
Alternative strategy to identify systematic reviews in the context of a guideline

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Background: Searching for existing systematic reviews is a key step in the development of most guidelines, but retrieving all relevant reviews involves substantial work. In the context of the venous thromboembolism (VTE) guidelines of the American Society of Hematology we compared two different approaches.
Objectives: To compare a traditional search approach to an alternative approach using Epistemonikos database (www.epistemonikos.org) to identify systematic reviews relevant for a guideline.
Methods: We selected all of the questions (n=27) from one guideline (VTE treatment). The traditional approach included searches in MEDLINE, EMBASE and Cochrane, using a filter adapted from several sources (SIGN filters, KSA guidelines, NICE 144) plus filters to identify records relevant for VTE. The same terms for VTE were adapted to Epistemonikos syntaxis for the alternative approach. For both approaches, at least two researchers screened records. In the traditional approach potentially eligible articles were evaluated in full text for inclusion. In the alternative approach one review per question (index review) was selected, and reviews that shared at least one included study were evaluated for inclusion. The final reference selection was done by the chapter methodologist for both approaches. We calculated recall (included reviews/reviews identified by any approach) and search efficiency (included reviews/ initial number of records).
Results: Traditional approach returned 7678 citations, 159 full texts were retrieved, and 38 reviews were finally included. Epistemonikos approach returned 4434 citations, from which 406 were pre-selected (20 index reviews selected), 153 full texts were retrieved, and 94 were finally included. Recall was 39.6% (38/96) for traditional approach vs. 97.9% for alternative. Search efficiency was 0.0049 (38/7678) for traditional approach and 0.0211 for alternative (94/4434).
Conclusions: An alternative approach using Epistemonikos database was more sensitive and efficient than the traditional approach. These conclusions have important implications for improving efficiency and feasibility of guidelines, but need further validation.

Short oral session 11: Stakeholder involvement in evidence production, synthesis and use A

18187
Implementation of evidence-based practice in the Swedish social services – tensions and dilemmas

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Background: In 2008 a Swedish governmental report pointed out that the social services in Sweden increasingly need to conduct their work based on an understanding of the effects of their services. The report stressed the development of evidence-based practice (EBP) as the long-term objective. The Swedish National Board of Health describes EBP as “a deliberate and systematic use of the best available knowledge; the professional’s expertise; the person’s situation, experience and preferences”. However, the Swedish social services have been relatively slow to implement EBP. Several reasons can be given for this, including lack of contact between the different levels (national, regional and local) and tensions between state authorities, researchers and professionals regarding how EBP should be pursued in practice.
Objectives: The objective is to examine: 1) the tension between the critical-appraisal approach and the guidelines approach with respect to how EBP ought to be conducted in the social services; and, 2) the argument based on paternalism. A critique sometimes raised against the EBP work carried out by the state authorities is that it is paternalistic because it promotes a top-down approach in relation to the professionals in social work.
Methods: Philosophical methods, such as conceptual analysis and argument analysis, will be used in order to explore the tensions and arguments. Conceptual analysis aims at clarifying and/or defining concepts. Argument analysis describes arguments and evaluates their validity and relevance. Results and
Conclusions: The tension between the critical-appraisal approach and the guidelines approach creates a

dilemma for the practitioner. However, the practitioner's dilemma can be managed by being able to respond to critiques directed against the two approaches. Even if it can be shown that the implementation of EBP in the social services has taken a top-down approach, it is important that professionals are not treated paternalistically.

18188

Strategies to improve participant recruitment to randomised-controlled trials: A systematic review of non-randomised evaluations

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Background: Poor recruitment to randomised-controlled trials is common, and has the potential to result in underpowered studies which do not satisfactorily answer research questions. Trial-recruitment strategies attempt to support recruitment, yet evidence to support the choice of recruitment interventions is weak. Non-randomised evaluations of recruitment interventions have traditionally been rejected in systematic reviews due to poor methodological quality but non-randomised evaluations are far more common than randomised ones.
Methods: We searched the Cochrane Methodology Register, MEDLINE, EMBASE, CINAHL and PsycINFO for non-randomised studies that included a comparison of two or more recruitment interventions. Two reviewers assessed all studies for inclusion, and extracted data on the host study, recruitment methods, embedded study design, participant characteristics and setting. The primary outcome is number of individuals or centres recruited, the secondary outcome is cost per recruit. The Cochrane risk-of-bias tool for non-randomised studies was used to assess methodological quality of studies. Where possible, data were pooled and then assessed using GRADE.
Results: We screened 9642 abstracts, of which 248 full-text articles were assessed and 107 studies eligible for inclusion. The majority of included studies omit important details regarding interventions; largely focusing on mode of delivery over content of the intervention itself. Despite the volume of included studies, poor reporting severely limited their utility and prevented studies from being pooled. Interventions centred on methods from the advertising world; newspaper notices, radio and television commercials, and brochures and flyers distributed within the community. This low-quality body of work neither provides evidence for or against the use of these common approaches.
Conclusions: The synthesised evidence from the world's most frequently used design to evaluate trial recruitment strategies has little or no value to those planning trial-recruitment strategies. Some studies do add value, however. Clear guidance is needed to ensure that these studies are done well, or not at all.

18227

Working in partnership with stakeholders to update a priority Cochrane Review: implementation and evaluation

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Background: Active involvement of healthcare consumers and other stakeholders, including health professionals and policy makers, in systematic reviews is widely advocated but remains a challenge. There is uncertainty about how to effectively engage stakeholders and examples of good practice are needed.
Objectives: To describe the implementation, experiences and influence of stakeholder engagement in an update of a priority Cochrane Consumers and Communication Cochrane review. Methods and results: The author team is

led by a researcher responsible for the technical aspects of the review and a consumer who leads the stakeholder engagement. Stakeholders include Australians representing the people most likely to use the review (consumers, policy makers, health-service managers, clinicians, researchers, guideline developers, and community educators). The engagement model includes both an advisory group (n = 18), to ensure currency and relevance of the review, and a broader review network (n = 30), to optimise reach and influence of the published review. For the advisory group, contributions are invited at key stages, including finalising the question and scope, interpreting analysis, and finalising review drafts. Review network members are kept informed about review progress and their advice sought on dissemination plans. The participation mode is flexible, with face-to-face single or group meetings, phone or email contributions encouraged. The process evaluation seeks to understand how stakeholders were involved, their perspectives on being involved, and how their involvement influenced the review, the research process and the people involved. Observation and document analysis are being used to capture engagement activities, and a combination of online surveys and semi-structured interviews to collect researcher and stakeholder experiences and perceptions.
Conclusions: Our stakeholder-engagement approach includes novel elements aimed at expanding the options for meaningful stakeholder involvement in systematic reviews.

18652
Evidence-based practice, safety and care quality in nursing: A clinical supervision contribution

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Background: Nurses in clinical practice need to be flexible and be prepared for complex and demanding clinical situations. Therefore, clinical supervision is essential for quality of nursing care and is a mechanism to support nurses in their clinical practice, promoting a reflective practice and supporting continuous quality-improvement activities, essential for evidence-based practice (EBP) contexts. It is necessary to equip nurses with knowledge and skills required for EBP and design a programme by considering supporting factors and barriers for integrating EBP into the clinical setting. In the research field it is crucial to study the mechanisms for translating evidence knowledge into clinical practice. This research plan is part of a larger study, namely: 'Clinical Supervision for Safety and Care Quality' (C-S2AFECARE-Q).
Objectives: To develop nurses' evidence-practice knowledge and skills through the implementation of a clinical-supervision model which promotes safety and improvements in the quality of care.
Methods: In the first stage we will conduct a scoping review using the Joanna Briggs Institute (JBI) approach that aims to map the existing body of literature regarding EBP implementation programmes or interventions. Then we will implement action-research in three phases. In the first one, we will identify nurses' clinical-supervision needs and assess their evidence-based practice capabilities, using the Portuguese version of Evidence-Based Practice Questionnaire (QECPBE-20). In the second phase we will implement the clinical-supervision model and incorporate the results of the scoping review. In the last phase, we will assess the same indicator with the instrument used in phase one and compare the results. We will also relate the efficacy of the clinical-supervision model to the development of clinical efficacy and evidence-based practice skills.
Conclusions: The project will demonstrate the importance of clinical supervision in nursing as a support for EBP context implementation, promoting safety and quality of care. We are now developing the scoping review and will present the protocol at the Summit.

19308

Social, behavioural and community-engagement interventions (SBCE) for reproductive, maternal, newborn and child health: An evidence-gap map (EGM)

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Background: The Global Strategy for Women's, Children's, and Adolescent's Health (2016-2030) was released in parallel with the SDGs, both promoting a broader vision for health.The strategy calls for action towards three objectives for health: survive (end preventable deaths), thrive (ensure health and wellbeing) and transform (expand enabling environments). To achieve these objectives, decision makers need access to high-quality evidence on intervention effects, particularly for social, behavioural and community-engagement (SBCE) where global guidance is less prevalent. A plethora of studies is produced every year but they are scattered across different sources. Existing research may therefore not be accessed and used optimally to inform decisions and prioritise new research. To address these issues the World Health Organization (WHO) and the International Initiative for Impact Evaluation (3ie) developed an evidence-gap map (EGM) of key SBCE interventions related to reproductive, maternal, newborn and child health (RMNCH).
Objectives: (1) Identify existing systematic reviews of SBCE interventions that can be used to inform programmes for RMNCH; and, (2) Identify evidence gaps where new primary studies, systematic reviews and WHO guidelines could add value.
Methods: EGMs are collections of impact evaluations and systematic reviews of intervention effects in a sector or thematic area, presented visually on an interactive platform. The scope of the EGM was defined, and reviewed by an expert group of key stakeholders. We included systematic reviews and impact evaluations assessing the effects of SBCE interventions in low- and middle-income countries and used systematic methods to identify, categorise and describe studies. We critically appraised systematic reviews, and used data visualisation to map the evidence and research gaps. Results and conclusions: We identified over 600 completed impact evaluations and systematic reviews meeting our inclusion criteria. This presentation will summarise the findings of the EGM and demonstrate how decision makers and researchers can use the EGM to explore the available evidence base.

Short oral session 12: Stakeholder involvement in evidence production, synthesis and use B

18431
Stakeholder involvement in the preparation of systematic and rapid reviews: a cross-sectional study

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Background: To foster knowledge transfer and implementation it is considered essential to involve stakeholders in the preparation of systematic reviews (SR) and rapid reviews (RR). To date, little is known about the types of stakeholders involved and details of their engagement.
Objectives: In the field of health-services research, we aimed to assess main factors of the study focus and reporting characteristics of stakeholder involvement (SI) in published full SR (Cochrane and non-Cochrane) and in RR (RR and Dare RR published in the Cochrane database).
Methods: Based on the pre-designed protocol, searches were performed in Ovid Medline, Embase and the Cochrane databases. From the records retrieved between January 2011 and October 2015 a sample of 30 reviews for each of the 4 groups was randomly selected resulting in a total of 120 reviews. The standardised data-

extraction forms assessed 9 epidemiological, study focus-based variables and 13 reporting characteristics with 10 targeting SI.
Results: From a total of 57 822 articles, 533 (0.9%) were identified as Cochrane SRs, 56 986 (98.5%) as non-Cochrane SRs, 208 (0.4%) as RRs and 95 (0.2%) as Dare RRs. Among non-Cochrane SRs 13% (4/30) were based on a study protocol and 17% (5/30) of RRs. Reporting of potential conflicts of interest was not included in 33% (10/30) and 27% (8/30) for non-Cochrane SRs and RRs, respectively. We found SI in 13% (4/30) of Cochrane SRs, 17% (5/30) of non-Cochrane SRs, 40% (13/30) of RRs (40%) and 80% (24/30) of Dare RRs (80%). Overall, 33% (15/46) of these articles mentioned positive effects of SI. Discussion: RRs and Dare RRs involved stakeholders more than twice as frequently than non-Cochrane and Cochrane SRs and they involved them at different stages and in a greater variety per review. SRs often target decision makers as audience but rarely involve them directly in their production. Conclusion: Overall, stakeholder engagement was not general practice in either review type (with the exception of Dare RRs). Especially for SRs, there is still a great potential to improve reporting as well as to engage stakeholders in practice-academia partnerships.

18612
Lessons on strengthening use of evidence in government institutions: A case study of the SECURE Health programme in Kenya

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Background: Although decision makers recognise the value of evidence in formulating sound and sustainable policies that will achieve their objective, often research evidence is not consulted when developing policies. The paucity of research evidence on how to bridge this gap, particularly in the global south presents a big challenge. To identify what works in improving demand and use of research evidence in decision and policy making, the Strengthening Capacity to Use Research Evidence (SECURE) Health programme was developed in Kenya and Malawi in consultation with high- and mid-level policy makers from the Ministry of Health (MoH) and Parliament of Kenya.
Objectives: The SECURE Health programme aimed at increasing demand and use of evidence in health policy making through strengthening capacity to use research evidence in policy making among high- and mid-level leaders, and strengthening organisational systems to support use of research evidence.
Methods: Science policy cafes centred on different health issues, policy dialogues with high-level policy makers, and training on Evidence-Informed Policy-Making (EIPM) were used to achieve programme objectives.
Results: After 3 years of implementation, there was a considerable increase in demand for evidence, particularly on resource allocation at the MoH, and improved individual technical capacity of policy makers in EIPM. The strategic links and continuous relationships developed between policy makers and researchers has created an ecosystem of facilitation of the transition of research evidence into policy. Remarkably, a Health Research and Development Unit was set up in the MoH, and is fully operational. However, institutional leadership and capacity to enable an EIPM environment still remains a mirage.
Conclusions: In order to create a sustainable and productive EIPM environment, the institutional systems and capacity to foster a culture of EIPM need to be created and maintained. More EIPM champions are needed in government institutions, with high-level leaders trained to demand and use evidence to inform all decisions and policies.

18639
Explaining randomisation to potential clinical trial participants

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Background: An important challenge in recruiting people to clinical trials is explaining randomised-controlled trials (RCTs). In the pilot phase of a RCT involving babies born at less than 32 weeks gestation that aimed to compare delayed and early cord clamping (CORD pilot trial), clinicians found it particularly difficult to explain why mothers in the study could not choose either option and why randomisation was important. We asked healthcare consumers, familiar with RCTs, to help us find ways to explain these issues in time-limited recruitment situations.
Objectives: To gain understanding from consumers on how to communicate randomisation to the public and to better inform potential participants of clinical trials.
Methods: An interactive 2-stage workshop was devised for consumers at a Cochrane Colloquium. In stage 1, workshop members were given magazine adverts promoting purported clinical benefits and asked to design a study that would address the claims made. Subsequent discussion progressed to the concept of randomisation, potential biases that can arise and how these can be minimised with careful study design. With this background, in the second stage of the workshop, the consumers were asked to develop statements describing randomisation to potential study participants of the CORD pilot trial. The consumers, working in groups, were specifically asked for ways to explain to women why trial participants would not be able to choose which study group they could go into, and so would not have a say in when their baby's cord would be clamped. The final statements produced by the different groups were discussed by all workshop members and modifications suggested. This work was later presented at a CORD pilot trial collaborators' meeting.
Results: The process identified expressions that consumers disliked and expressions that they preferred when discussing clinical trials. The issues raised will be presented along with the statements the consumers produced explaining the CORD pilot RCT.
Conclusions: Healthcare consumers can contribute to recruitment to RCTs by developing wording to help explain randomisation to potential trial participants.

18677

Facilitating the implementation of evidence through a structured programme: the Joanna Briggs Institute Clinical Fellowship programme

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Background: The implementation of evidence into practice is imperative to ensure the best outcomes are achieved for global health. However, evidence implementation is difficult and currently there is a large gap between evidence and practice. At the Joanna Briggs Institute we have developed an evidence implementation programme, titled the JBI Clinical Fellowship, to support clinicians to implement evidence into their organisation and everyday practice.
Objectives: To provide an overview of the JBI Clinical Fellowship programme and to discuss outcomes achieved from the programme.
Methods: The JBI Clinical Fellowship is a 6-month, workplace, evidence-based, implementation programme involving 2 x five-day intensive training workshops in the Joanna Briggs Institute, and a workplace, evidence-implementation project in the intervening months. Participants learn about clinical leadership and how to implement evidence in practice to improve outcomes, with their project report published in our peer-reviewed journal, The Joanna Briggs Database of Systematic Reviews and Implementation Reports.
Results: The JBI Clinical Fellowship, first established in the early 2000s, has trained and supported hundreds of people internationally to undertake evidence-implementation projects in their clinical setting. Presenters will share their experience running the programme and discuss the impact of the programme globally.
Conclusions: The JBI Clinical Fellowship programme has evolved over the last 15 years to adapt to new emerging methodologies, software development and as we increase our knowledge regarding effective implementation.

The impact of the programme has been outstanding and resulted in hundreds of successful implementation projects and immeasurable benefits for patients worldwide.

18850

More knowledge is required. Stakeholder engagement and ownership in systematic reviews

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Background: Systematic reviews on environmental issues are still not commonly used by decision makers. One important reason is the lack of ownership of the results. The Swedish centre of the Collaboration for Environmental Evidence (CEE) network, the Mistra Council for Evidence-based Environmental Management (EviEM), has had regular contact with stakeholders since its start in 2012. Stakeholders have been asked to suggest topics for reviews and each EviEM review team co-designs the protocols with a group of stakeholders interested in that specific issue. In addition, in 2015 EviEM asked a large group of stakeholders about their knowledge needs for their work on environmental management.
Objectives: To strengthen stakeholders' ownership and participation in knowledge production.
Methods: Environmental work in Sweden is guided by 16 Environmental Quality Objectives (EQOs) that describe the quality of the environment that Sweden wishes to achieve by 2020. Inspired by Sutherland (2006, 2011) EviEM asked environmental authorities, county administrative boards, interest groups and various other stakeholders about what knowledge they lacked in order to achieve the Swedish EQOs. Through surveys and interviews we collated a range of different issues. The questions collected were then used as a basis for a workshop conducted in the spring of 2015. The workshop was attended by stakeholders and environmental researchers. The workshop took place over two half days to allow time for reflection, and groups were given the opportunity to comment on each other's work during the process. Results &
Conclusions: The workshop resulted in 9 overall groups of topics related to the EQOs, with 5 to 7 questions in each group. Several proposals overlapped, and we have summarised the 56 questions into a total of 12 broader topics of knowledge needs. These areas include both issues that require further primary research and issues where a systematic review could provide a synthesised answer.

18870

Globalising knowledge translation: experiences from the evidence to action thematic working group

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The Evidence to Action Thematic Working Group (E2ATWG) is one of 10 TWGs established within Health Systems Global (HSG), the first international membership organisation fully dedicated to promoting health systems research (HSR) and knowledge translation (KT). E2ATWG is critical for galvanising momentum, both within HSG and in the field, in moving E2A and KT forward - particularly as the Sustainable Development Goals provide a new pathway to encourage evidence-informed policy. In this presentation we highlight how a global membership presents exciting opportunities for activities, such as creating a global inventory of KT initiatives, and channels for engagement (e.g. webinars, Twitter chats, etc.). We also discuss how being part of a diverse, international and multicultural society presents important challenges, like ensuring language inclusion, and contextual considerations particularly for capacity strengthening. We share experiences of the E2ATWG since its inception (~3 years) and invite colleagues to contribute to the discussions about the value of such groups and their potential for individual, institutional and network influence.

18942

Engaging Australian Aboriginal and Torres Strait Islander communities and stakeholders in evidence synthesis

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Background: The Australian NHMRC-funded Centre for Research Excellence for Improving health services for Aboriginal and Torres Strait Islander children aims to provide evidence-informed practices through evidence synthesis. Aboriginal and Torres Strait Islander (hereafter respectfully referred to as Aboriginal) children are a particularly vulnerable group within Australia with poorer health and social outcomes compared to non-Aboriginal children. Developing Cochrane and other evidence-synthesis reviews that have direct relevance and impact for Aboriginal children and their families is important for improving health and wellbeing.
Objectives: To discuss how our programme of evidence synthesis has been developed to ensure Aboriginal communities and stakeholders are involved in our work. Methods and
Results: As part of standard practice, researchers work with Aboriginal communities to ensure research is actually needed within communities and is respectfully delivered. We have used a range of methods to ensure our evidence-synthesis programme delivers high-quality, equitable reviews. These include: • engaging Aboriginal Community Controlled Health Organisations that represent the community; • developing steering and project advisory groups as part of our Cochrane reviews to provide consumers with input into outcomes and summary of findings tables; • working with Aboriginal and non-Aboriginal researchers to increase capacity to complete evidence-synthesis reviews including Cochrane and non-Cochrane systematic reviews and scoping reviews; and, • completing preliminary investigations with families and service providers prior to initiating evidence-synthesis reviews.
Conclusions: Evidence synthesis, particularly Cochrane reviews, have been successful in influencing policy and practice to improve programme sustainability and health outcomes for Aboriginal people. However, there are acknowledged barriers that result in poor uptake of evidence-synthesis outcomes. We describe a number of processes which can be easily incorporated into reviews to ensure reviews are important and of relevance to the communities they may assist.

Posters

Poster session 1 Wednesday: Evidence production and synthesis

1001

Effect of ondansetron in children with acute diarrhoeal illness and vomiting with some dehydration – a RCT in Kenyatta National Hospital

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Background: Each year almost 700 000 deaths occur worldwide due to acute diarrhoeal illness. Emesis in children with acute diarrheal illness is a significant deterrent to Oral Rehydration Therapy (ORT). An effective anti-emetic can thus improve ORT and reduce the need for intravenous (IV) rehydration and hospitalisation. Ondansetron has been shown to significantly reduce IV rehydration and admission in children with acute diarrhoeal illness. No African data exist on the use of ondansetron in acute diarrhoeal illness.
Objectives: The primary objective was to determine the effect of ondansetron in reducing IV rehydration and hospitalisation in children with acute diarrhoeal illness. The secondary objective was to compare persistence of vomiting and diarrhoea after administration of ondansetron.
Methods: This was a parallel randomised double-blinded placebo-controlled trial. Children between 6 and 59 months presenting with some dehydration and vomiting in an acute diarrhoeal illness were enrolled. In addition to standard treatment subjects were randomised to receive either ondansetron or placebo. Subjects were monitored for ORT failure and admission for IV rehydration, and for 48 hours thereafter for persistence of vomiting and diarrhoea. Relative risks and 95% confidence intervals were used for categorical data while means and standard deviation were used for continuous data.
Results: The subjects that failed ORT and required hospitalisation was 18% less in the ondansetron group versus placebo, i.e. RR = 0.17 (95% CI 0.04 - 0.73), P value <0.01. Children who received ondansetron versus placebo had significantly less emesis i.e. 0.7 vs. 1.4 mean episodes during ORT and 0.25 vs. 0.52 mean episodes at 24 hours follow up. The proportion of children with cessation of vomiting during ORT was also higher in the ondansetron group (51.6%) compared to placebo (27.9%). There was no difference in the diarrhoeal episodes between the two groups for up to 48 hours later. (Figure 1)
Conclusions: In children with an acute diarrhoeal illness that failed ORT due to emesis, the proportion admitted for IV hydration was smaller in those who had received ondansetron versus placebo.

Attachments: Figure 1.jpg

1002

Conduct and dissemination of epidemiological systematic reviews in Latin America and the Caribbean: Pitfalls and lessons learned

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Background: The Institute for Clinical Effectiveness and Health Policy operates since 2003 as an Argentine Cochrane Centre. We have performed epidemiological systematic reviews (SRs) related to Latin America and the Caribbean (LAC). We faced countless methodological problems and gained considerable experience in dealing with them.
Objectives: To describe our experience in conducting and disseminating epidemiological SRs in LAC between 2007-2016.
Methods: Cross-sectional study and qualitative analysis of lessons learned. Endpoints were number of primary

research studies included, country of origin, study design, risk of bias, citations in social media, number of researchers and experts involved, and time devoted by them to the conduct of systematic reviews.
Results: A total of 19 systematic reviews were produced, including 1016 primary research studies. Brazil (35%) and Argentina (19%) contributed with the largest number of studies. The most frequent design was cross-sectional (35%). Only 26% of studies entailed low risk of bias (Table 1). The mean impact factor of publications was 3.04±1.51. In general terms, the number of references found in social media was very low. On average, each SR required 6 researchers who worked in the process for at least 5 hours per week for 8 months (See Table 2) We identified key aspects at different stages of the process.
Conclusions: Special approaches are needed in order to identify, summarise, interpret and disseminate epidemiological evidence in Latin America and the Caribbean.

Attachments: Table 1.pdf, Table 2.pdf

1003
Comparison of trends in study designs types in LILACS and PubMed in the last decade

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Background: There is steady growth in systematic reviews (SRs) in PubMed but trends for other study types are not well known.
Objectives: To analyse the trends in absolute and relative numbers of SRs, RCTs, reviews and case reports, out of all published studies in the last 10 years in LILACS and PubMed.
Methods: We performed a search in January 2017 on PubMed and LILACS, to identify SRs, trials, non-SRs ('Reviews') and case reports published between 2006 and 2015. Due to incomplete indexation of studies we excluded the years 2016 and 2017 from the analysis. The search methods by study type are described in Box 1. The choice of these methods was based on common search terms in both databases to favour the comparability of proportions. We analysed trends of each study type through a regression analysis performed in Stata® 14.1.
Results: In the last 10 years, there was a similar, statistically significant upward trend publication of SRs, both in LILACS and PubMed (Fig. 1a, 1b). There was no change in the trend of publication of RCTs in LILACS (Fig. 2a) but there was a statistically-significant decrease in the proportion of RCTs published in PubMed, despite opposite results in the absolute number of trials (Fig. 2b). There was a statistically significant downward trend in Reviews in LILACS (Fig. 3a) but no important change in the proportion trend in PubMed, despite a statistically significant increase in the absolute number of Reviews (Fig. 3b). There was a statistically significant downward trend in Case Reports proportion in LILACS (Fig. 4a) but without statistical significance in absolute numbers. There was a statistically significant decrease trend in Case Reports proportion trend in PubMed (Fig. 4a) despite a non-statistically-significant increase in absolute numbers (Fig. 4b).
Conclusions: SRs publication is steadily growing, both in LILACS and PubMed. The trend patterns are different for other study designs and differ in absolute and relative trends between both databases.

Attachments: Box 1. Search methods by study design.jpg, Fig 1-2.jpg, Fig 3-4.jpg

1004
Programme drift or product failure? Learnings from 10 years of efforts to scale up zinc and ORS for the management of acute diarrhoea in children under 5

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Background: In 2004, global guidelines for the management of acute diarrhoea were amended to include the recommendation that children receive zinc supplementation for 10-14 days, in addition to Oral Rehydration Salts (ORS) and continued feeding. In the decade since these guidelines were issued, and nearly 4 decades following the introduction of ORS, ORS is used in 41% of diarrheal episodes, while zinc is used in only 5%.
Objectives: We conducted a systematic review to synthesise available evidence on zinc introduction at scale and improve understanding of the relationship between programmatic inputs and health outcomes and impact as a result of zinc introduction in low-resource settings.
Methods: We searched for articles published from 2004 to April 2015 in over two dozen databases and grey literature. Unique programmes were identified and categorised according to geographic setting and scale. Articles describing programmes implemented to a population of ≥100,000 were assessed qualitatively to understand the relationship between global level factors, programmatic inputs and health outcomes and impact as a result of zinc introduction.
Results: Twenty-one countries were reported to implement zinc at scale, through 28 unique programmes identified from full-text articles (n=39), reports (n=11), and abstracts (n=9). Where zinc coverage exceeded 60% under effectiveness trial conditions, the mean coverage attained was 18% for all other programmes. Studies with higher coverage were implemented to fewer beneficiaries; observed to employ community-based delivery strategies; provide zinc of free of charge to patients; and included elements of behaviour-change communication directed to both providers and caregivers alike. Additional factors including global level initiatives; public-private sector engagement; standalone vs. implementation as part of broader initiatives; product; as well as monitoring and evaluation activities are reviewed.
Conclusions: Lack of support for diarrhoea treatment in the last decade has compromised efforts to scale up. More robust research is needed to understand the factors associated with higher coverage for zinc and ORS at scale.

1005
Research integrity in low- and middle-income countries: Systematic review of prevalence of poor authorship practice, plagiarism and other misconduct

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Background: Good reporting practices are important to preserve research integrity. There are few published studies on research integrity in low- and middle-income countries (LMICs). Taking stock of these existing studies from LMICs is important to inform future research and promote best practices.
Objectives: To identify and summarise empirical studies about research integrity in LMICs in relation to poor authorship practice, plagiarism and other misconduct.
Methods: We included quantitative and qualitative studies on research-reporting practices (e.g. authorship, plagiarism, conflicts of interest, data fabrication) amongst health researchers in LMICs. We searched electronic databases, conference abstracts and contacted experts in the field to identify relevant studies. Study selection, data extraction and quality assessment was done by one author and checked by another. We contacted authors in cases of missing data. We narratively synthesised results. Preliminary results: We screened titles and abstracts of 6003 citations. Of 113 full-texts, we included 33 studies comprising 20 cross-sectional surveys of healthcare researchers, 10 cross-sectional surveys of journals, 2 qualitative studies and 1 case study. Included studies were conducted in Asia (n=11), Middle East (n=10), sub-Saharan Africa (n=4), Latin America (n=6), and across more than one region (n=2). Most studies were judged as having moderate to high risk of bias, had a small sample size and

were poorly reported. Across studies, self-reported prevalence of guest authorship varied from 8.3-65% (n=9); ghost authorship from 6.4-43% (n=4); plagiarism from 0-73%; data fabrication from 0-14.4% (n=3); and, data falsification from 0-27% (n=3). Factors influencing misconduct included lack of knowledge and experience, institutional shortcomings such as lack of consequences, pressure from funders and need for recognition.
Conclusions: Studies from LMICs reported high rates of research misconduct. Studies were generally small and based on survey participants' observations. Studies conducted across LMICs were limited to cross-sectional surveys of journals.

1006
ICT4D: Does the evidence match the hype?

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Background: Digital and data solutions are increasingly promoted as enhancing the benefits from programs. Often the achievements are reported in terms of uptake or publicity. It is important to know whether there is an evidence base that shows attributable outcomes.
Objectives: In this study, we explore the breadth and depth of evidence coming from impact evaluation studies for digital and data interventions. We identify clusters and gaps in evidence and synthesize the evidence in clusters.
Methods: We use the technology subset of studies collected using a systematic search and screening protocol covering science, technology, innovation, and partnerships. The dataset is restricted to studies using counterfactual methodologies to estimate effect sizes. We use a quality rating tool to rate each of the included studies. We then catalogue these studies according to intervention categories, which group the evidence according to theories of change. Within each group of studies, we assess the breadth and depth of evidence presented in terms of geographic coverage, scale of evaluated programs, duration of implementations, etc. Where sufficient homogeneity exists, we conduct synthesis.
Results: We find a large cluster of studies on mHealth interventions, although the interventions within this broader category are heterogeneous. Our synthesis suggests that several types of mHealth interventions are generally effective. We find a significant share of the evidence base are studies of quick or small pilot programs without evidence of effectiveness at scale. Additional results are to be determined, as the research is in process.
Conclusions: There is a growing base of evidence on digital and data interventions for development with some categories that have sufficient quality and consistency across studies for synthesis. More research is needed to demonstrate effectiveness of these programs at scale and over time.

1007
A review of contemporary clinical study protocols approved by research ethics committees in Denmark to assess if earlier trials were cited

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Background: A new trial should always be justified by reference to earlier, similar trials, if possible, ideally in the form of a systematic review of such trials. Unfortunately, this is not always the case which may lead to superfluous trials exposing participants to known inferior treatment.
Objectives: To evaluate whether planned trials were ethically and scientifically justified by the existing literature. We obtained a cohort of protocols for randomised clinical trials with patient-relevant outcomes approved by an ethics committee in Denmark (October 2012 to March 2013). Trials with surrogate outcomes were excluded.
Methods: We searched for descriptions of systematic reviews, earlier trials, any search strategy used, and

procedures for monitoring descriptions of harms emerging in the literature during the trial. We compared this information with trials and reviews in the Cochrane Database of Systematic Reviews, PubMed and Embase. We also screened ClinicalTrials.gov and the WHO International Clinical Trials Registry Platform (ICTRP) to ensure that commercial sponsors did not withhold information of similar trials either planned or conducted simultaneously with the trial protocol we assessed. RESULTS: We extracted data from 67 protocols with a planned enrolment of 74 998 participants (median 405, range 30 to 18 000). Most trials were either fully or partially industry funded (N = 43) and multinational (N = 38), and most were either Phase 3 trials (N = 26) or studying procedures (N = 23). 42 protocols cited a systematic review of the intervention investigated, and several of the remaining trials were so unique that a systematic review clearly was not needed. Only two protocols provided evidence of having performed a systematic literature search. Procedures for monitoring harms described in the literature during the trial were not described. Conclusion: Our preliminary results are encouraging. Most contemporary clinical trials with patient-relevant outcomes were ethically justified, however, only 2 described their search strategy and none described monitoring publications of harms.

1008

Validity of patient-reported data collected through mobile application in a first paediatric at-home study

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Background: Clinical studies in children are challenging, yet they are urgently needed to advance our knowledge on optimal dosing and action of medicines. Remote 'at-home' trials are suggested as an option for a more patient-centred future of trials.
Objectives: This pilot aimed to study the technical and practical feasibility of collecting valid data in paediatric at-home trials.
Methods: This was a single-centre, prospective pilot study including 22 children, 2-5 years of age, undergoing elective tonsillectomy at the University Children's Hospital Basel (model population). Using a specifically developed mobile application, time-stamped data were collected by caregivers on 2-4 inpatient study days with the support of study nurses and on 3 consequent study days at home. Biological samples (saliva) were collected throughout the study. The primary endpoint was the proportion of complete and correct caregiver-collected clinical data and saliva samples in the at-home setting. Secondary endpoints included practicability of this type of study for participants, the proportion of caregivers consenting to take part in the study (including reasons associated with non-consent), and the cost-effectiveness of performing such a study.
Results: At the Summit, we will present the results on the completeness and correctness of data collected by caregivers through a mobile application, and the practicability of mobile-data collection for both caregivers and study personnel. In particular, we will report on how reliable (i.e. match between automatically recorded time point and caregiver-reported time point of data entry) data collection was performed, and the factors associated with valid or invalid data collection (i.e. specific time points, inter-caregiver variation). Conclusion: Although remote trials are increasingly performed, the aspect of data validity, and therefore study quality, is often neglected. This is a first pilot investigating the correctness of data collected by patients remotely. If proven successful, this approach holds considerable promise in strengthening the evidence-base on treatment options

1009

Involving people with learning disabilities in guideline development – a systematic review

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Background: Patient and public involvement is a core principle of many guideline programmes, and is often cited as an indicator of quality (1,2). However, there can be challenges in how best to involve people who may have specific barriers to full and meaningful engagement in complex decision-making processes. In order to support a pilot of involving people with learning disabilities (PLD) in national guidelines, we reviewed the evidence on the impact of involving PLD in complex decision making.
Objectives: To evaluate the impact of involving people with learning disabilities (PLD) in policy development.
Methods: We undertook a systematic review of published and grey literature. We selected 166 papers (based on title and abstract), from an initial database of 3582 references. Of these, 5 were unavailable, and 2 full text papers met inclusion criteria. A further 6 papers are on order.
Results: The aim was assess the impact of involving PLD in policy development on: 1) PLD involved in policy development; 2) others involved in policy development (e.g. committee members, staff); and, 3) policy outcomes. Themes identified to date relate only to theme 1, and are: • Support: adjustments and relationships • Structures: processes/mode of operating • Reasons for participating: democratic, 'status symbol', communitarian • Experiences: positive and negative Conclusion: PLD can be supported to contribute to and participate in policy development; and the experience can be positive, particularly if adjustments are made. However, there is no evidence identified that evaluates the impact of this on others involved in the process or on the decisions themselves. Further research is needed to understand this. 1. Brouwers M, Kho ME, Browman GP, Cluzeau F, feder G, Fervers B, Hanna S, Makarski J on behalf of the AGREE Next Steps Consortium. AGREE II: Advancing guideline development, reporting and evaluation in healthcare. Can Med Assoc J. Dec 2010, 182:E839-842 2. Standards for developing trustworthy guidelines 2011 http://www.nationalacademies.org/hmd/Reports/2011/Clinical-Practice-Guidelines-We-Can-Trust/Standards.aspx

1010
Identifying and prioritising areas for guidance development in public health

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Background: Increasingly, guidelines developers have fewer resources for guideline development at all stages – including identification of topics for guidance (pre-scoping). We needed a more efficient process to ensure that new guideline topics are useful to the system and meet user needs.
Objectives: To describe a new rapid pre-scoping process for public health guidance.
Methods: A new rapid process for pre-scoping was developed. It consists of • An initial request to consider guidance in a broad area of public health concern (for example, housing and health). • Early and ongoing discussion with key policy experts and stakeholders • A report describing relevant information on the impact of the issue, current policy, legislation and practice, and a high-level assessment of the potential evidence base. The report also includes a recommendation as to whether guidance should be produced, and if so, the population, interventions and settings that should be included. • A final decision made by a Topic Selection Committee.
Results: We will present key features of the process and the outputs, using several case studies. We will also describe how this helped identify priorities for the public health system, and aligned these with other initiatives and work programmes.
Conclusions: Pre-scoping identifies key areas where new guidance can add value very early in the development process. It also reduces the risk of scoping topics that are already covered by guidance or policy or have a limited evidence base; hence wasting resources. Pre-scoping has helped provide early definition and focus in a topic area before the full engagement and cost of scoping. It also supports transparent decision making when a suggested area is not found to be suitable for guidance development. Early and rigorous pre-scoping using a range of

evidence and sources and adopting a pragmatic approach can help identify areas for guideline development prior to full scoping.

1011

Effectiveness of control measures to prevent transmission of tuberculosis infection to healthcare workers: A systematic review

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Background: To prevent transmission of tuberculosis (TB) infection in healthcare workers (HCWs), the World Health Organization (WHO) recommends a range of controls. However, assessment of the evidence for their effectiveness is limited, particularly in high TB burden settings.
Objectives: To conduct a systematic review evaluating whether WHO recommended administrative, environmental and personal protective measures are effective in preventing tuberculin skin test conversion among HCWs.
Methods: Using pre-defined inclusion criteria, we searched a number of electronic databases, complemented by hand-searching of reference lists and contacting experts. Reviewers independently selected studies, extracted data and assessed study and overall evidence quality.
Results: Ten before-after studies, including two from high TB burden countries, were included in the review. All reported a decline in tuberculin conversion frequency after the intervention. All were assessed as having 'unclear' or high risk of bias on relevant EPOC criteria. The quality of evidence was rated as 'moderate' using GRADE criteria.
Conclusions: This systematic review provides moderate quality of evidence for the effectiveness of a combination of control measures to reduce TB transmission in HCWs in both low and high TB burden settings. However, more studies in low resource, high TB burden settings are needed, with explicit attention to methodological quality. Such studies should also focus on control measures that are appropriate to the resources and capabilities of the health system.

1012

Climate change impact on human migration: mapping the evidence

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Background: Anthropogenic climate change has and will continue to have an increasing impact on human welfare whilst possibly inducing movement of people from environmentally stressed areas within or across national borders. The topic of climate-related migration is becoming a growing concern as effective policy responses, plans for adaptation and investments are yet to be developed. Nevertheless, causal links between climate change and human migrations are often unclear or complex and the notion of a 'climate migrant' is argued to be a social construction. Evidence of climate change-related impacts and extreme weather events on human migration seem to not be synthesised in a systematic manner so far and data on these effects seem to be scattered across multiple sources.
Objectives: We aim to systematically identify and catalogue all available empirical literature on the impact of climate change and extreme weather events on people's movements (including domestic and international

movements, forced displacement, migration, and planned resettlement).
Methods: To describe the state of knowledge on the topic and to identify knowledge gaps, we will use a systematic mapping method that includes: 1) publishing a peer-reviewed protocol of planned methods; 2) a comprehensive search for evidence (including grey and peer-reviewed literature); 3) screening evidence for relevance against predetermined inclusion criteria; 4) extraction of descriptive information (meta-data) and categorisation of studies (coding); 5) assessment of the validity (quality and generalisability) of included evidence; and, 6) generating a systematic map database and reporting of the map findings. A scoping search for literature indicated that the size of the evidence base is moderate (Table 1). Apart from peer-reviewed literature, a significant amount of relevant evidence may be available from the grey literature sources as climate change and migration is an area of work of many international agencies, including the International Organization for Migration and the United Nations High Commission for Refugees.

Attachments: GES_Table 1.pdf

1013
Involvement of government policy makers in prioritising national policy needs for systematic review: An Ethiopian experience

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Background: Multi-stakeholder involvement in policy making and evidence synthesis is the need of the hour. The Ethiopian evidence-based health care center (EEBHC) trained key experts involved in policy making and knowledge translation from Ethiopian Ministry of Health (MOH) and Ethiopian Public Health Institute (EPHI) on comprehensive systematic review. After the training, a team of policy makers from MOH , knowledge translation experts from EPHI and research experts from Jimma University (JU) involved in prioritising the policy topics which need systematic reviews to be conducted in Ethiopia.
Objectives: To explore the experience of involving policy makers in prioritising policy needs to conduct systematic reviews.
Methods: Accordingly, EEBHC selected two topics entitled, 'Compassionate, respectful and caring behaviour of the health professionals in the primary healthcare delivery in sub-Saharan Africa' and 'Mechanism of retaining and motivating healthcare workers in government institutions in Sub-Saharan Africa'. These policy makers were involved in all stages of the systematic review process starting from title selection, literature search through databases like PUB MED, CINAHL, EMBASE, MEDLINE, COCHRANE, JBI database for published evidences and other gray sources. The centre completed the protocol and submitted it to JBI for approval and this team of experts will continue working together to finalise the review.
Results: Until now, the centre had challenges and positive experiences. MOH people are so busy and continuous chasing them created positive energy among them and they took interest in selecting topic and the other review processes. They particularly, liked hands on 'search strategy' using various data bases and they said, “This helps us to search on any databases whenever needed in the future.” They also liked the process of 'inclusion and exclusion criteria' for a selected topic.
Conclusions: Involving policy makers in the whole process of evidence synthesis is a very useful experience that we learn until now and the future experiences will be shared at the Summit.

1014
Are school-based mindfulness interventions effective? A Campbell systematic review and meta-analysis

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Background: Mindfulness-based interventions (MBIs) have been gaining widespread support by schools, practitioners and policy makers to address multiple and varied outcomes for youth; however, the strength of the evidence to support such adoption is not clear.
Objectives: The purpose of this review was to examine evidence of MBIs implemented in school settings on academic, behavioural, cognitive and socio-emotional outcomes to inform practice and policy.
Methods: Systematic review and meta-analytic procedures were used to examine effects of school-based MBIs on academic, behavioural, and socio-emotional outcomes for students. A comprehensive and systematic search was undertaken to locate published and unpublished randomised or quasi-experimental studies conducted between 1990 and 2016. Descriptive analysis was conducted to examine and describe characteristics of included studies including risk of bias. Two coders independently screened studies and extracted data from included studies. Effect sizes were calculated using the standard mean difference effect-size statistic, corrected for small sample size bias (Hedges' g). Meta-analysis, assuming random effects models using inverse variance weights, was used to quantitatively synthesise results across studies.
Results: Thirty-five studies met inclusion criteria for this review. Overall, there was a moderate to high risk of bias across the 35 studies. Meta-analytic findings indicate small, yet statistically significant effects on cognitive outcomes and socio-emotional outcomes and small and non-significant effects on academic outcomes.
Conclusions: The findings largely correspond to what we might expect given the mechanisms by which mindfulness interventions are hypothesised to work (i.e. more directly targeting cognitive and socio-emotional processes). Additionally, we know little about the costs and adverse effects of school-based MBIs—the costs of implementing these programmes may not be justified, and there are some indications that MBIs may have some adverse effects on youth. Given our findings, the evidence from this review urges caution in the enthusiasm for, and widespread adoption of, MBIs in schools.

1015

Journal policies and registration of randomised-controlled trials of non-regulated healthcare interventions: A cross-sectional study

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Background: Prospectively registering randomised controlled trials (RCTs) is an integral part of proper trial conduct and is enforced for trials of regulated interventions including drugs, biologics and devices. However, the registration of trials of non-regulated interventions including diets, exercise, surgery and therapies has received less attention.
Objectives: In the current study, we performed a search of RCTs of non-regulated interventions to assess: 1) journal prospective trial registration policies; 2) the proportion of prospectively registered RCTs; and, 3) the adequacy of outcome registration.
Methods: The search strategy included all journals listed in the 2014 Thomson Reuters Journal Science Citation Index - Expanded categories of behavioural sciences, nursing, nutrition & dietetics, psychology, rehabilitation and surgery. We searched daily for RCTs of non-regulated interventions that appeared in PubMed from 18 March to 17 September 2016. Information on journal-registration requirements, trial registration and outcome definition was extracted.
Results: We reviewed 953 eligible trials published in 254 journals. Among the 254 journals, 43 (16.9%) journals required prospective registration of published trials. Of 953 included trials, only 189 (19.8%) were registered

prospectively. Only 60 of the 454 registered trials (13.2%) were registered pre-enrolment, clearly defined a primary outcome variable and time point, and were considered as adequately registered. Of the 60 articles reporting on trials with adequately registered outcomes, 35 (58.3%) articles reported outcomes analyses in a manner that was consistent with registered outcomes. Conclusion: The rate of registration of RCTs of non-regulated interventions, the rate of registration and the adequacy of outcome definition is less than ideal. Greater efforts beyond journal policies to increase prospective trial registration practices and adequate reporting of outcomes are warranted.

1016

Brazilian guidelines for the management of adult potential brain-dead donors

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[6] Centro Hospitalar Unimed, Joinville, Brazil
[7] Faculdade de Medicina de São José do Rio Preto, São José do Rio Preto, Brazil
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[10] Hospital Moinhos de Vento, Brazil

Background: Organ shortage for transplantation has become an important public health problem. Better management of potential donor may increase effective organ donation, number of organs recovered, and quality of organs transplanted.
Objectives: To present the recommendations of the Brazilian guideline for the management of potential brain-dead donors.
Methods: The guideline was developed through the collaborative efforts of the Brazilian Society of Intensive Care (AMIB), the Brazilian Organ Transplantation Society (ABTO), the Brazilian Research in Intensive Care Network (BRICNet), and the Brazilian Ministry of Health. Questions were drafted in July 2016; guideline scope was based on AMIB-ABTO guidelines for maintenance of adult patients with brain death and potential for multiple organ donations, published in 2011. Important outcomes considered for decision making were: cardiac arrest, number of organs recovered or transplanted, and clinical outcomes in the organ recipient (e.g. delayed graft function, need for hemodialysis, and organ survival). We conducted rapid systematic reviews for evidence search and synthesis; quality of evidence was assessed using GRADE. Guideline meetings occurred in November 2016 and February 2017; guideline panel was composed of intensivists, transplant co-ordinators, professionals from various transplant teams, and Brazilian Ministry of Health representatives. GRADE evidence to decision tables were used for making recommendations.
Results: We provided 21 clinical practice recommendations regarding temperature control, mechanical ventilation, vital signs, electrolyte control, blood pressure management, hormone replacement, diet, use of antibiotics, blood transfusion, and use of checklists. Most recommendations were considered conditional (weak) and quality of evidence was low or very low.
Conclusions: The use of evidence-based guidelines may improve the management of potential brain-dead organ donors. Although this guideline has been developed for the Brazilian context, it may be adopted by or adapted to other countries.

1017

Quality of statistical methods reported in randomised-controlled trials of type-2 diabetes (T2DM) published in 2016

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Background: High-quality primary clinical research data from randomised-controlled trials (RCTs) is essential for clinical decision making and incorporation into systematic reviews. An essential part of a high-quality study is the use of appropriate statistical analyses that are adequately reported. Inappropriate use and inadequate reporting of statistics have been found in medical publications. Objective: To assess the quality of statistical methods reported in RCTs of interventions for type-2 diabetes (T2DM) in a cross-sectional study.
Methods: We searched CENTRAL, MEDLINE, PUBMED and other resources for RCTs of interventions for T2DM published in 2016. We used 'Statistical Analyses and Methods in the Published Literature' (SAMPL) guidelines.to assess the quality of statistical reporting. Each of the 14 statistical methods reporting domains was summarised using descriptive statistics.
Results: We included 34 RCTs from 20 journals. All the articles were inadequate for one or more reporting domains (Table 1). These were the statistical procedures to modify raw data (94%); outliers (100%) and missing data (53%); as well as verification of assumptions used in statistical tests (79%). Fewer numbers failed to evaluate the model of the statistical techniques used to compare groups (47%); mention the statistical package used (41%); define smallest clinically significant effect size (38%); methods used for each analysis (29%); description of the intent of analysis (21%); and, methods used in post hoc analyses (21%). The main outcome and associated descriptive statistics (2.9%); type-1 error (8.9%); and, analytical methods for primary objective (5.9%) were most adequately reported. Conclusion: These critical shortcomings could have adverse effects on the interpretation of primary reports (possibly affecting patient care) and limit the ability to use these studies in systematic reviews. We suggest the use of statistical analyses and methods reporting guidelines, such as SAMPL, complementing the Consolidated Standards of Reporting Trials (CONSORT) statement to improve the quality of reporting.

Attachments: Table 1.pdf

1018
Dissemination and implementation science from the US National Institutes of Health

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Objectives: Through sharing programme knowledge, this poster aims are: 1) to increase knowledge of Implementation Science (IS) research and funding opportunities, particularly late-stage T4 translation research opportunities, including development of country- or region-specific chronic cardiovascular and pulmonary disease research; 2) to emphasise IS and its potential for evidence-based clinical interventions; and, 3) to encourage IS contributions and applications to NIH, including those from low-resource settings.
Background: IS strives to increase knowledge about how to understand and accelerate the successful application of evidence-based practices across the spectrum of stakeholders, contexts, health and social issues, in both high- and low-resource settings. IS targeted at reducing the burden of disease associated with chronic obstructive pulmonary disease, ischaemic heart disease, and stroke and related co-morbidities will have significant domestic and global impact.
Methods: Research and funding opportunities for IS will be described, including key frameworks and concepts such as efficacy-effectiveness hybrid designs (Curran et al. 2012) and late-stage T4 translation research (Sampson et al. 2016). Strategies for successful IS research proposals (Pequegnat et al. 2011; Procter et al. 2012), NIH priorities and the strategic vision of the Center for Translation Research for Implementation Science at the National Heart, Lung, and Blood Institute will be highlighted.
Results: Shared knowledge on how to use IS within clinical practice and research will be presented. NIH research

priorities and specific funding opportunities, particularly for heart, lung, blood and sleep diseases, and co-occurring HIV and other chronic diseases will be highlighted. Conclusion: IS methodologies, applications, and funding opportunities to promote the uptake of research findings exist and are important for reducing the burden of disease, particularly for cardiovascular, lung and other chronic diseases and co-morbidities.

Attachments: T4 symphony slide.jpg

1019

ROC analysis of prediction for gastric cancer development using serum pepsinogen and Helicobacter pylori antibody tests

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Background: Chronic Helicobacter pylori infection plays a central role in the development of gastric cancer as shown by biological and epidemiological studies. The H. pylori antibody and serum pepsinogen (PG) tests have been anticipated to predict gastric cancer development.
Objectives: We determined the predictive sensitivity and specificity of gastric cancer development using these tests.
Methods: Receiver operating characteristic analysis was performed, and areas under the curve were estimated. The predictive sensitivity and specificity of gastric cancer development were compared among single tests and combined methods using serum pepsinogen and H. pylori antibody tests.
Results: From a large-scale population-based cohort of over 100 000 subjects followed between 1990 and 2004, 497 gastric cancer subjects and 497 matched healthy controls were chosen.The predictive sensitivity and specificity were low in all single tests and combination methods. The highest predictive sensitivity and specificity were obtained for the serum PG I/II ratio. The optimal PG I/II cut-off values were 2.5 and 3.0. At a PG I/II cut-off value of 3.0, the sensitivity was 86.9% and the specificity was 39.8%. Even if 3 biomarkers were combined, the sensitivity was 97.2% and the specificity was 21.1% when the cut-off values were 3.0 for PG I/II, 70 ng/mL for PG I, and 10.0 U/mL for H. pylori antibody.
Conclusions: The predictive accuracy of gastric cancer development was low with the serum pepsinogen and H. pylori antibody tests even if these tests were combined. To adopt these biomarkers for gastric cancer screening, a high specificity is required. When these tests are adopted for gastric cancer screening, they should be carefully interpreted with a clear understanding of their limitations

1020

Mortality reduction from gastric cancer by endoscopic screening based on a population-based cohort study

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Background: In 2012, about 1 million new cases of gastric cancer were recorded worldwide, and half of these cases occurred in Eastern Asian countries. Although endoscopic screening for gastric cancer has already been introduced in Korean national programmes, evidence for mortality reduction from gastric-cancer screening using endoscopy is still unclear.
Objectives: To evaluate mortality reduction from gastric cancer by endoscopic screening, we performed a population-based cohort study where both radiographic and endoscopic screenings for gastric cancer have been

conducted.
Methods: The subjects were selected from the participants of gastric cancer screening in 2 cities in Japan (i.e. Tottori and Yonago) from 2007 to 2008. The subjects were defined as participants aged 40-79 years who had no gastric cancer screening in the previous year. Follow-up of mortality was continued from the date of the first screening to the date of death or up to 31 December 2013. A Cox proportional-hazards model was used to estimate the relative risk (RR) of gastric-cancer incidence, gastric-cancer death, all cancer deaths except gastric-cancer death, and all-causes deaths except gastric-cancer death.
Results: The numbers of subjects selected for endoscopic screening was 9950 and that for radiographic screening was 4324. The subjects screened by endoscopy showed a 67% reduction of gastric cancer compared with the subjects screened by radiography (adjusted RR by sex, age group, and resident city = 0.327, 95%CI: 0.118-0.908). The adjusted RR of endoscopic screening was 0.967 (95%CI: 0.675-1.386) for all cancer deaths except gastric-cancer death and 0.928 (95%CI: 0.739-1.167) for all-causes deaths except gastric-cancer death.
Conclusions: This study indicates that endoscopic screening can reduce gastric-cancer mortality by 67% compared with radiographic screening. This is consistent with previous studies showing that endoscopic screening reduces gastric-cancer mortality.

1021
Investigating the incidence of delirium and its associated symptoms in a medical intensive care unit in Southern Taiwan

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Background: Delirium occurs in up to 78% of clinical cases and is often not detected by medical personnel early enough. The researcher investigated the incidence and appearance of delirium and its associated symptoms in critically ill patients in intensive care units (ICUs).
Objectives: Investigating the incidence of delirium and its associated symptoms in an ICT unit in Southern Taiwan.
Methods: Participant recruitment was between 18 September and 13 October 2016. Criteria included: (1) being a ICU patient aged at least 20; (2) understanding spoken Mandarin or Taiwanese; (3) having no cognition-related medical history such as change in the mental state, brain tumor, dementia, schizophrenia, alcohol and substance abuse prior to ICU admission; and, (4) having a clear mind with no disorientation disorder upon ICU admission. The Confusion Assessment Method for the Intensive Care Unit (CAM-ICU) was used as the tool for assessing delirium. The CAM-ICU was used at ICU admission and a reassessment was performed every 24 hours until the assessment scores became positive.
Results: Delirium occurred in 24 out of 89 patients, an incidence rate of 26.9%. The highest rate, which was 36%, occurred on the third day after ICU admission. Delirium occurred on average on the 2.89th day and mostly between 7:00 pm and 2:00 am, amounting to 41.7 %. Delirium-associated symptoms, disorientation and meaningless responses or repetition of a specific behaviour had the highest percentage each of 47%, followed by inability to co-operate with medical measures at 36%, poorer concentration, perplexity or sleep disorders at 18% each, clinical manifestations including incoherent speech, heightened excitability and illusion or incoherence and changes in reflex responses at 9% each.
Conclusions: It is simpler and easier to prevent delirium than to treat an excited, delirious critically ill patient. Hospital admission, subject to routine monitoring, should include assessment for delirium, as well as close follow-up and observation for delirium-associated symptoms and vigilance amid delirium. Early detection and identification can prevent further damage.

1022
Amiodarone for arrhythmia in Chagas patients: A systematic review and individual patient meta-analysis

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Background: Chagas disease (CD) is a neglected chronic condition caused by Trypanosoma cruzi that has a high prevalence and causes significant morbidity in Latin America. Up to 30% of chronically infected patients develop cardiac manifestations. Ventricular arrhythmias are common in patients with Chagas cardiomyopathy and amiodarone has been widely used to reduce cardiac mortality. Objective: To assess the effect of amiodarone in patients with a cardiac form of Chagas disease.
Methods: We searched the following electronic databases (from inception to December 2016): MEDLINE (PubMed), EMBASE and LILACS. We included both randomised and observational studies evaluating the use of amiodarone, compared to placebo or no treatment, in patients with arrhythmia and Chagas cardiomyopathy. Two reviewers independently selected studies, extracted data and assessed risk of bias. No language restriction was applied. Overall quality of evidence was assessed using the Grading of Recommendations, Assessment, Development and Evaluations (GRADE). Individual patient data (IPD) meta-analysis was performed with R software, using Poisson and binomial distributions.
Results: We screened 378 titles and abstracts and included 3 before-and-after studies with a total of 52 patients. Two studies with a total of 38 patients included full dataset, allowing IPD analysis. Amiodarone reduced ventricular tachycardia in 99.9% (95%IC 99,8%-100% in 24-hour Holter monitoring), ventricular premature beats in 93,1% (IC 82%-97,4% in 24-hour Holter monitoring) and incidence of ventricular couplets in 79% (RR 4.75 (IC 2,56-8,79% in 24-hour Holter monitoring). An additional study with 14 patients reduced ventricular premature beats in 73.2%. Overall quality of evidence for reduced arrhythmias is moderate due to the large effect observed. Sinus bradycardia was found in 14 of 52 patients.
Conclusions: Although there is moderate certainty of its effect on ventricular arrhythmias, the quality of the evidence on the effect of amiodarone on mortality and cardiac arrest in Chagas disease is very low. PROSPERO: CRD42017056765

1023
Sharing individual-participant data from clinical research: point of view of Italian patient and citizen associations

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Background: Transparency and access to research data is a key feature for research policies, leading to optimal use of data generated by research projects. Access to individual-participant data (IPD) could improve data quality, accuracy of estimates, and robustness of analyses, as well as optimise data re-analyses and pooling. Numerous organisations have endorsed the need to provide the scientific community with access to IPD and currently several initiatives aim to develop best practice on sharing and re-using this data. To be effective, these standards should consider the opinions, attitudes and perceptions of citizens, patients and their associations. Country-specific analyses may highlight cultural and social factors that could play a role in facilitating data sharing.
Objectives: To explore opinions, attitudes and perceptions of Italian patient and citizen associations about sharing of IPD from clinical research.
Methods: An online survey will be sent to about 2000 Italian patient and citizen associations included in a database kept updated at the Mario Negri Institute. These associations are active at the local, regional and national level, cover a broad spectrum of disease areas and have different expertise in clinical research promotion, lobbying activities, and support to patients and families. Associations will be sent an introduction text and be invited to complete an online survey structured in two main areas: association's characteristics - e.g.

activities, funding sources, size - and attitude and perceptions on sharing IPD from clinical research - e.g. knowledge of the discussions on data sharing, official positions of the association, perceived risks and advantages of sharing, suggestions to implement best practice in terms of access model, informed consent, transparency of processes. Responses will be analysed and possible drivers of positive attitudes or reluctances explored.
Results: The introduction text and survey are currently under testing by a sample of patient representatives with the goal of launching the survey in May. We aim to present the results at the Summit, provide feedback to associations, and publish them.

1024

AHRQ EPC Methods Report: Characterising research evidence needs of hospitals and healthcare systems in the US

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Background: Decision makers in hospitals and healthcare systems use research evidence to inform decision making, but little is known about these research evidence needs.
Objectives: The Agency for Healthcare Research and Quality (AHRQ) Evidence-based Practice Center (EPC) programme sought to characterise the research evidence needs of hospital and healthcare system decision makers in the US to ensure that production of evidence syntheses aligns with decision-makers' needs.
Methods: We examined evidence reviews produced by three US-based healthcare organisations: • ECRI Institute, which offers a health technology assessment information subscription service (HTAIS); • the Veteran's Health Administration's Evidence-based Synthesis Program (VHA ESP), providing evidence for the largest integrated health care system in the US; • Penn Medicine Center for Evidence-based Practice (CEP), serving an academic healthcare system. Evidence review characteristics examined included: requestor types, report types, clinical specialties and technology classes examined, and other characteristics including synthesis methods and dissemination approaches.
Results: ECRI's HTAIS received 700 requests in 2016, 307 (44%) of which came from hospitals or health systems in the US (median 4.5 hospitals per system, range 1 to 34). Of the hospitals, 20% were rural, 27% had <100 beds, and 31% had no academic affiliation. Of the systems, 61% were moderately or highly centralized. The Table describes the characteristics of the ECRI reports, as well as those produced by the VHA ESP and the Penn CEP. A wide range of clinical and administrative decision makers request evidence reviews, and the topics are similarly broad ranging from evidence to guide: clinical care; purchasing of medications and devices; procedural and non-procedural interventions; and processes of care.
Conclusions: Hospitals and healthcare systems have diverse needs for research evidence with multiple requestors. Adapting the production of evidence syntheses to efficiently meet this need is likely to be one of the biggest challenges facing organisations that provide evidence reviews for healthcare systems.

Attachments: Table_cau.pdf

1025

Knowledge and awareness of and perception towards cardiovascular disease risk in sub-Saharan Africa: A systematic review

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Background: Cardiovascular diseases (CVDs) are the most common cause of non-communicable disease mortality in sub-Saharan African (SSA) countries. Evidence on the awareness and knowledge level of cardiovascular diseases (and associated risk factors) among populations of sub-Saharan Africa is scarce.
Objectives: This review aimed to synthesise available evidence of the level of knowledge of CVDs in SSA.
Methods: Five databases were searched for publications up to December 2016. The quality of the quantitative and quantitative studies was assessed based on National Institute of Health (NIH) Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies and the Critical Appraisal Skill Programme (CASP) tool, respectively. Narrative synthesis was conducted for knowledge level of CVDs, knowledge of risk factors and clinical signs, factors influencing knowledge of CVDs and source of health information on CVDs. The review was registered with Prospero (CRD42016049165).
Results: Twenty studies were included in this review: 18 quantitative and 2 qualitative, Figure 1. This review identified low knowledge level, poor perception of CVDs, and knowledge gaps for risk factors and clinical symptoms of CVDs. In most studies, less than half of the subjects had good knowledge of CVDs. The percentage of participants unable to identify a single risk factor and symptom of CVDs ranged from 1.8% to 56%, and 9% to 77.3%, respectively. Educational level and type of residence influenced knowledge level of CVDs among SSA populations, Figure 2.
Conclusions: Knowledge level of CVDs, risk factors and warning signs for CVD are low among sub-Saharan African populations, and this is linked to low educational attainment and rural residency. The findings of this study prompt educational campaigns to enhance knowledge of CVDs in both rural and urban communities.

Attachments: Figure 1.png, Figure 2.png

1026
Survey among IVF professionals to assist the development of a decision aid in reproductive medicine

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Background: In recent years, in assisted reproduction (ART) programmes, both the rate of live births and also the rate of multiple pregnancies has increased, along with their associated risks. The more embryos transferred, the higher the pregnancy rate and the multiple-pregnancy rate. Shared decision making regarding the number of embryos to be transferred is a big challenge for both patients and healthcare providers. Patients do not always completely understand or feel totally satisfied with the information received to make an informed decision. And sometimes, even doctors are not convinced about the benefits of an elective single-embryo transfer (e-SET).
Objectives: To identify the barriers doctors have in recommending e-SET. This information could be relevant for developing a decision aid to improve the knowledge translation to patients.
Methods: A cross-sectional survey. The participants were medical doctors who are members of the Argentine

Society of Reproductive Medicine. After piloting the survey, it was sent by mail and administered through SurveyMonkey. A reminder was sent every week for 3 weeks.
Results: A total of 279 of 619 physicians, all specialists in reproductive medicine replied to the anonymous survey. Main reasons for not offering e-SET to their patients, were that they value achieving a pregnancy higher than the negative aspects of a complication (57.1%), and also that the pregnancy rate with e-SETs could be low (42.4%). Regarding the responsibility of the decision about the number of embryos to transfer, 76.7% thought that patients and doctors should make the decision together, while 22.9% thought that it should be decided by the doctor alone. 58.4% thought that the complications of multiple pregnancies should be discussed more and 93.3% would like to have a formal decision aid to help with counselling.
Conclusions: Currently there are no decision aids used globally about this topic. This survey shows some unilateral decisions taken by doctors in this field. This information could be extremely useful in developing a tool that helps in the shared-decision process.

1027
Clinical research in occupational trauma in Germany: Current status, current needs and future demands

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Background: The German healthcare system is unique because of its different Social Security Codes (SSC), rooting back to the late 1890s. While inpatient treatment may represent one of the most advanced across all high-income countries (according to World Bank definitions), Germany still lacks integrated care. This hampers clinical research because patients cannot be followed-up after discharge from the hospital. Currently the only exemptions are occupational injuries (covered by federal SSC VII), allowing for life-long follow-up by both hospitals and private practices, and easy transfer of patient data across different care providers.
Objectives: The objective of this study was to identify deficits within the current research framework across the 9 hospitals of the German Statutory Accident Insurance, and to define basic resources needed at institutions to conduct clinical research according to international standards (i.e. ICH-GCP).
Methods: Using focus-group sessions and interviews, we developed a 30-item questionnaire to be answered by different stakeholders of the abovementioned hospitals. By pilot testing at a single centre, we redefined both the wording of individual questions as well as answering options. We mainly aimed at a qualitative assessment of data. Statistical analyses included description of baseline profiles (using means, medians, or percentages, as appropriate), and suitable measures of distribution.
Results: Preliminary data suggest a dominance of basic over clinical research across the 9 institutions investigated. We identified parallel and abundant laboratory projects which need to be both scrutinised and harmonised in the near future to avoid wasting resources. On the other hand, there is a strong demand for clinical research support (i.e. by statistical consulting, professional research associates and study nurses).
Conclusions: Even in a high-income and welfare setting, resources for clinical research are limited, and current spending does not meet current needs. Future funding must comprise complex interventions and care bundles in prevention and rehabilitation rather than individual interventions.

1028
Prioritising systematic review topics in public health: A Delphi study with a broad range of stakeholders.

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Background: Evidence-based research intends to produce relevant and top-priority evidence that responds to existing evidence gaps. Research priority setting is important to investigate which evidence gaps are deemed most important and it supports future health research to conform both health and health evidence needs. However, studies that are prioritising systematic review topics in public health are rare.
Objectives: To inform the research agenda and dissemination strategy of Cochrane Public Health Europe, we conduct priority setting studies on systematic review topics in Switzerland, Austria and Germany. This pilot study is the first one and is conducted in Switzerland. We aim to investigate which systematic review topics in public health have to be prioritised according to a wide variety of stakeholders. Furthermore, we analyse why the stakeholders prioritise specific topics by using assessment criteria in the priority setting exercise.
Methods: We will conduct a two-round modified Delphi study, incorporating anonymous web-based questionnaires. In the first round public health stakeholders suggest relevant assessment criteria and potential priority topics. In the second round the participants indicate their (dis)agreement with the results of the first round and rate the review topics with the criteria. Finally, we compare the results between different stakeholder groups.
Results: The targeted public health domains included are prevention, health promotion, and health services. 175 organisations - including policy-makers, academia, NGOs, health insurers and representatives of health professionals - are invited to participate in the pilot study. The Delphi rounds will be conducted in spring 2017. Hence, results will be available at the time of the Summit.
Conclusions: The results of this study will support Cochrane Public Health (CPH) author groups in improving the relevance of the groups´ future review work. Furthermore it increases the opportunity to intensively interact with relevant stakeholders in the ongoing work of CPH. The same study will be conducted in Austria and Germany and will have the potential to be replicated in other European countries.

1029
Neglected tropical diseases: What is happening in Africa?

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Background: Neglected tropical diseases (NTDs) are communicable diseases affecting more than a billion people living in developing countries. There are 18 NTDs defined by the World Health Organization (WHO) and a roadmap to prevent, control, eliminate and eradicate NTDs. Decisions regarding effective strategies will be based on results of controlled trials conducted in affected participants.
Objectives: Identify and describe randomised-controlled trials (RCTs) of NTDs conducted in Africa which are planned, ongoing, completed and published.
Methods: We conducted a cross-sectional analysis of Africa-based NTD trials registered on WHO International Clinical Trial Registry Platform (ICTRP) a platform for planned trials. Data extraction included trial location, intervention, participant age and funders. We used registry identifiers to search PubMed for publications. Descriptive analysis was conducted in MS Excel™.
Results: ICTRP was searched (11 January 2017) identifying 87 trials registered from 2005 to 2017. Current trial status indicates 62 completed, 1 withdrawn, 2 unknown status, 6 recruiting, 4 not recruiting and 7 ongoing. Sixty-nine studies evaluate an intervention and 18 are observational. Interventions include prevention (4), therapeutics

(57), surgery (5), behavioural therapy (2) and education/training (1). Funding sources include local and international universities and governments, non-governmental organisations, and the pharmaceutical industry. For the 69 registered African trials, 29 were found on PubMed.
Conclusions: Mapping NTD clinical trial activity on ICTRP and searching for published trials results can provide data on planned, ongoing or completed trials for researchers, funders and policy makers. Current research focuses on identifying safe and efficacious treatment for NTDs.

1030

A comprehensive review of the evidence regarding the effectiveness of community-based primary healthcare in improving maternal, neonatal and child health: Neonatal health findings

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Background: Lack of access to safe delivery care, emergency obstetric care and postnatal care continue to be challenges for reducing neonatal mortality. This poster reviews the available evidence regarding the effectiveness of community-based primary health care (CBPHC) and necessary conditions for effectiveness in improving health during the first 28 days of life. Methods A database comprising evidence of the effectiveness of projects, programmes and field research studies in improving maternal, neonatal and child health through CBPHC has been assembled (Gates Funded). From this larger database (N=354), a subset was created from assessments relating to newborn health (N=88). Assessments were excluded if the project beneficiaries were more than 28 days of age, or if the assessment did not identify 1 of the following outcomes related to neonatal health: changes in knowledge about newborn illness, care seeking for newborn illness, utilisation of postnatal care, nutritional status of neonates, neonatal morbidity, or neonatal mortality. An equity assessment was also conducted on the articles in the dataset related to neonatal health.
Results: There is extensive evidence that CBPHC can be effective in improving neonatal health, and we present information about the common characteristics of effective programmes. Twice as many reported an improvement in neonatal health as did those that reported no effect and only 2 reported a negative effect. Many of the neonatal projects assessed in our database utilised community health workers, home visits, and participatory women's groups. Many of the interventions used in these projects focused on health education (recognition of danger signs), including promotion of exclusive breastfeeding. Almost all of the assessments that included an equity component showed that CBPHC produced neonatal health benefits that favoured the poorest segment of the project population. However, the studies were quite biased in geographic scope, with more than half conducted in South Asia, and many were pilots rather than at scale. Further research on this topic is needed in Africa and Latin America, as well as in urban and peri-urban areas.

1031

A comprehensive review of the evidence regarding the effectiveness of community-based primary healthcare in improving maternal, neonatal and child health: Summary and recommendations of the Expert Panel

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Background: The contributions that community-based primary healthcare (CBPHC) and engaging with

communities as valued partners can make to the improvement of maternal, neonatal and child health (MNCH) is not widely appreciated. This unfortunate reality is one of the reasons why so few priority countries failed to achieve the health-related Millennium Development Goals by 2015. This article provides a summary of a series of articles about the effectiveness of CBPHC in improving MNCH and offers recommendations from an Expert Panel for strengthening CBPHC that were formulated in 2008 and have been updated on the basis of more recent evidence.
Methods: An Expert Panel convened to guide the review of the effectiveness of community-based primary healthcare (CBPHC). The Expert Panel met in 2008 in New York City with senior UNICEF staff. In 2016, following the completion of the review, the panel considered the review's findings and made recommendations. The review consisted of an analysis of 659 unique reports, including 581 peer-reviewed journal articles, 12 books/monographs, 4 book chapters, and 72 reports from the grey literature. The analysis consisted of 698 assessments since 39 were analysed twice (once for an assessment of improvements in neonatal and/or child health and once for an assessment in maternal health).
Results: The Expert Panel recommends that CBPHC should be a priority for strengthening health systems, accelerating progress in achieving universal health coverage, and ending preventable child and maternal deaths. The panel also recommends that expenditures for CBPHC be monitored against expenditures for primary healthcare facilities and hospitals and reflect the importance of CBPHC for averting mortality. Governments, government health programmes, and NGOs should develop health systems that respect and value communities as full partners and work collaboratively with them in building and strengthening CBPHC programmes – through engagement with planning, implementation (including the full use of community-level workers), and evaluation. CBPHC programmes need to reach every community to achieve universal coverage of evidence-based interventions.

1032
Impact of short inter-pregnancy interval on pregnancy outcome in a low-income country

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Background: Short inter-pregnancy interval (IPI) could have an adverse influence on pregnancy outcome especially in low-income countries. Previous researchers from sub-Saharan Africa have documented an alarming trend of short IPI but evidence is lacking on its impact on pregnancy outcome.
Objectives: To determine the impact of short IPI on pregnancy outcome in Nigeria.
Methods: This was a longitudinal study of 271 eligible, pregnant women receiving antenatal care in a tertiary hospital in Nigeria. For every consecutive pregnant woman with short IPI (< 18 months) recruited into the study; a suitable control (matched for age, parity and social class) with IPI ≥ 18 months was recruited. Data collected included socio-demographic data, IPI, current pregnancy history, gestational age, and any adverse pregnancy or perinatal outcomes. Hypotheses were tested using logistic-regression analysis where applicable. All tests were two sided, and statistical significance was considered to be at probability value of < 0.05.
Results: The mean age of the participants was 31.6 ± 4.2 years, and the mean neonatal birth weight was 3.3 ± 0.6kg. The prevalence of maternal anaemia was significantly higher in women with short IPI than in the control group (OR: 3.0; 95% CI: 1.76 – 5.09; P < 0.001). Other maternal and perinatal outcome measures including poor maternal weight gain, premature rupture of membranes, preterm labour, pregnancy-induced hypertension, third-trimester bleeding, primary postpartum haemorrhage, preterm birth, stillbirth, birth asphyxia, and low birth weight had no significant association with short IPI (P > 0.05).
Conclusions: Short IPI is associated with anaemia in pregnancy in Nigeria. However, further research with larger sample sizes and preferably randomised-controlled trials are needed to provide sound evidence on the impact of short IPI on maternal outcome in low-income countries.

Attachments: Cochrane_SA_ABSTRACT.pdf

1033

Lumping versus splitting in systematic reviews: Feasibility for researchers versus relevance for practice and policy?

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Background: A clearly defined research question is key in developing a systematic review (SR). However, within international development there is a tendency to work with very broad SR questions. This consideration in defining research questions is known as 'splitting versus lumping', where 'splitting' is focusing on a single, well-defined intervention, and 'lumping' broadens the scope at the intervention, outcome and study type level.
Objectives: To reflect on the pros and cons of lumping versus splitting in a mixed-methods SR on the effectiveness and implementation of WASH (water, sanitation, hygiene) promotion programmes to promote behaviour change in low- and middle-income countries.
Methods: The researchers' perspective was considered based on total time spent to develop the SR, the number of included studies, the number of outcomes for which data were extracted. The field perspective was obtained by 2 face-to-face consultations with funders, field practitioners and policy makers: one during the protocol phase, and one after the SR results were analysed/synthesised.
Results: From the researchers' perspective, the following favours splitting: time and resource availability, and capacity to deal with complexity at various stages in the SR. From the field perspective there is more often a tendency to lumping for innovation (the SR should not only confirm what is already known from practice), correspondence with real-life situation (in reality not 1 isolated intervention is implemented), and relevance of factors influencing implementation. An argument for splitting would be the simplicity of the analysis and presentation of results.
Conclusions: It is crucial for researchers to consult with different stakeholders beforehand if they want to develop a policy-relevant SR. However, this should be balanced against time and resources available.

1034

Evidence on the demographic dividend and its use in policy development and strategic planning in African countries

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Background: Many sub-Saharan African countries are beginning to recognise that there could be potential to harness the demographic dividend (DD) from the youthful population in the continent. The DD refers to the temporary economic benefit that can potentially arise from a significant increase in the ratio of working-age adults relative to young dependents that results from fertility decline. Indeed, many countries have modeled this potential for a DD and identified actions and policies to increase the likelihood of economic renaissance. As a result of this evidence, development plans and policies are being revised to take this evidence into effect.
Objectives: This paper aims at reviewing the use of DD evidence on policy and decision making and strategic planning among government institutions, particularly in Uganda, Zambia and at the African Union (AU). -

Methods: A systematic literature review will be contacted on all policies, development plans, long term vision documents, strategic plans and other government documents in Uganda, Zambia and AU developed after 2012 when the DD was recognised as a key framework for achieving the continent's development aspirations.
Results: An initial review of policy documents in Uganda showed that the vision 2030, and 4th national development plan are based on the DD agenda. The president, who in the past was a strong supporter of large population, has been instead advocating for a quality population with high levels of human development, thanks to evidence on DD. In Zambia, the 7th national development plan is based on the DD agenda, and the president is now a DD champion, advocating for use of evidence on DD in planning to achieve the country's economic targets. At the AU, the DD is the theme of the 2017 summit, with focus on investments on young people, the largest population category in the continent.
Conclusions: Evidence on the potential DD is increasingly playing a key role in economic target setting and financial planning in African countries. There is, however, need for more evidence on how to implement the DD framework, and more efforts to implement these evidence-informed documents.

1035

Evaluating evidence of radiation therapy in daily healthcare practices by developing a knowledge agenda – example from The Netherlands

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Background: It is estimated that for 50 per cent of healthcare the effectiveness is investigated insufficiently. There is an urgent call from politicians and society to reduce increasing healthcare costs but there is limited budget for evaluation research. Therefore it is essential to prioritise knowledge gaps. The Dutch Society for Radiation Oncology (NVRO), one of the Dutch medical specialty societies, has recently developed a knowledge agenda.
Objectives: The goal is to improve the quality and efficiency of care in radiation therapy. Patient perspectives are an important factor.
Methods: Examination of knowledge gaps was done in three ways: 1) Dutch guidelines addressing oncology/radiotherapy issues were scrutinised for recommendations with a low level of evidence; 2. members of the NVRO were asked to deliver knowledge gaps via an online survey; and, 3. remaining stakeholders such as care insurers, general practitioners, the Dutch Inspection of Healthcare and patient association(s) were asked to examine and deliver knowledge gaps. Next, a plenary meeting with radiation oncologists, stakeholders and patient association(s) was organised to prioritise the knowledge gaps per tumour type according to health gain, societal impact, urgency and ability to research. Finally, an overall top 10 was generated which will form the research programme of the NVRO in the upcoming years.
Results: An example of three knowledge gaps from the top 10 in the agenda are: 1) What is the additional value of radiotherapy in treating oligometastases with quality of life and lifespan as outcome measures? 2) What is the role of imaging techniques (such as PET or MRI) in preparing (dose and targeting), planning and executing a radiation treatment? 3) What is the effectivity of stereotactic radiation therapy in treating liver metastases of colorectal tumours?
Conclusions: Developing a knowledge agenda appears to be very useful to get insight into what evidence is missing in daily clinical care per specialty. Studying these knowledge gaps improves the level of evidence in daily practice and thereby quality and efficiency of healthcare.

1036

Global health, science and regulatory knowledge at the World Health Organization

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Background: This research addresses the modes of production and use of knowledge, in the global regulatory context of public health. In particular, it analyses the way in which scientific knowledge is mediated during the preparation of technical documents by the World Health Organization (WHO). The technical reports compete in the cognitive space for regulatory influence in the representation of authorised scientific discourse.
Objectives: We analyse the use of scientific knowledge and the definition of evidence during the preparation of WHO technical documents on contraception, nutrition and sodium consumption, and their impact on regulations in Argentina.
Methods: We used bibliometric and socio-bibliometric analyses of scientific publications, public documents and technical materials related to health. Public documents of the laws and regulations studied in the National Congress were considered, and the minutes of meetings were analysed. We also conducted semi-directed interviews aimed at investigating the experience of scientists, experts and other actors regarding their participation in the decision-making process.
Results: The technical reports were identified as a way of producing specific knowledge where practical and operational contents are prioritised and scientific consensuses are forced, to give rise to texts that are positioned 'in the name of science'. The selected experts presented differing attributes with respect to other researchers or academic peers who do not usually participate in these committees, especially with respect to their publications profile, their position within the mainstream, their place of origin and their technical background.
Conclusions: The current status and impact of expert committees in global health represents a challenge for science studies. This research shed light on the process followed in defining and discussing research at these committees and the role of scientific knowledge in the regulatory context. We have been able to identify differences that are key to understanding the influence of science, scientists and stakeholders during the compiling of a technical report.

1038

Increasing the generation of research among nursing and midwifery students: Empirical findings from Kamuzu College of Nursing, University of Malawi

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Background: Students, studying for Bachelors, Masters and PhD degrees in nursing and midwifery programmes at Kamuzu College of Nursing (KCN) conduct research and submit research dissertations in partial fulfillment of their degrees. As KCN increases its student intake and academic programmes, research generation is obviously on the rise.
Objectives: The aim of the study was to investigate factors, which inhibit and facilitate the conduct of research at KCN and to answer the question 'to what extent is the increase in research contributing to improvements in quality of research at KCN?'
Methods: This was an exploratory qualitative study. It included a desk review of research proposals and dissertations over 5 academic years and in-depth interviews with students and faculty members.
Results: The study findings show some challenges with the quality of research being done despite the potential for improvements. Research is being conducted primarily for the purpose of fulfilling the requirements of academic programmes; students engage in research not in line with their field of study; faculty members who supervise student research are allocated not based on their areas of specialisation; and, students are not properly prepared to undertake research. The choice of topics and methodologies chosen are basically a replication of previous research and qualitative research is preferred to quantitative methods.
Conclusions: KCN has the potential to improve the quality of research it generates. Gaps and areas that have to be addressed include: development of guidelines for research; reviewing curricula to include research-methodology modules; introducing quantitative modules including epidemiology, statistics or bio-statistics to prepare students for both quantitative and qualitative studies; and, building the capacity of faculty to teach and supervise students' research adequately.

1039

Quality of healthcare provided in a task-shifting health system: Experience from a mobile health service in a southern African country

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Background: Task-shifting is an innovative approach to expand healthcare delivery in settings with limited healthcare personnel. The World Health Organization defines task-shifting as "a process in which specific tasks are moved, where appropriate, to health workers with shorter training and fewer qualifications". Three mobile clinics in Namibia, run by a non-profit organisation utilise a task-shifting healthcare delivery model by employing nurses to provide services to people in remote areas at specified locations bi-monthly. Each clinic comprises of 2 nurses and a driver who performs administrative duties. Objective: To assess the quality of services provided by a mobile health clinic run by nurses and the potential of reproducing this healthcare delivery model in other resource-limited countries.
Methods: The three constructs (structure, process and outcomes) from the Donabedian model for measuring healthcare quality was applied to this evaluation; structure (vehicle, staff, schedule, fees); process (form and methods of service provision) and outcomes (treatment, referral, recurrence). Methods employed in this evaluation include: 1) review of 103 randomly selected consultation notes and comparison of the notes with the requirements in Namibia's Standard Treatment Guidelines; 2) Direct observation of practices in the mobile clinics; and, 3) Interviews with patients, mobile clinic staff, staff in the Ministry of Health and other stakeholders.
Results: The mobile health clinics had about 5000 visits annually and patients found it convenient that the mobile clinic schedule was predictable. Most cases seen were primary care cases and were managed according to the recommendation in the Namibian Standard Treatment Guidelines. However, standard definitions were not employed in categorising the diagnosis and there was overutilisation of antibiotics.
Conclusions: This model of healthcare delivery was effective in reaching remote areas and can be reproduced in most resource-limited settings. However, it would require regular reviews and re-training of nurses to provide the highest quality of care in line with the Standard Treatment Guidelines.

1041

Applying best-worst scaling to identify health-outcome preferences among patients with diabetes or hypertension and multiple chronic conditions

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Background: Treatment decisions and guideline development need to consider patient values and preferences. There is little evidence in the literature on patient preferences for health outcomes in people with hypertension or diabetes and multiple chronic conditions.
Objectives: To elicit patient preferences for clinically relevant and patient-important outcomes to guide decision making for treatment of hypertension and diabetes among people with multiple chronic conditions.
Methods: In collaboration with patient and caregiver focus groups, we determined clinically relevant and patient-important outcomes for two questions, one on second-line treatments for diabetes and the other on blood-pressure targets in hypertension. We designed the surveys as best-worst scaling tasks (case 1) based on the balanced, incomplete-block design. We sent both surveys to Kaiser Permanente Colorado patients with multiple chronic conditions and a Quan score of at least 3 and who have diabetes or hypertension, respectively. The analysis used best minus worst scores (BMWS) based on a preliminary dataset (N=154 (diabetes)/148 (hypertension)). BMWS reflect how many times an outcome was selected as best or worst, averaged across respondents. The range of scores depends on the design, i.e. how many times the outcome can be selected. The range is [-4,4] for diabetes and [-5,5] for hypertension outcomes.
Results: Our response rate was 46 per cent. BMWS are shown in Figure 1 for diabetes, and Figure 2 for hypertension. In diabetes loss of vision was considered the most worrisome outcome, followed by stroke and myocardial infarction. The least worrisome events were nausea or diarrhoea, mild depression and weight gain. In the hypertension survey, stroke was considered the most worrisome health outcome, followed by heart failure and myocardial infarction. The least worrisome were treatment burden, injurious falls and hypotension or dizziness. In both cases, mean scores did not go to the extremes.
Conclusions: The best-worst scaling allowed good discrimination between the importance of health outcomes among people with multiple chronic condititions.

Attachments: preferences_figure1.png, preferences_figure2.png

1042

A novel method for benefit-harm assessment based on individual patient data determines benefit-harm balance over time

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Background: Systematic reviews alone are often not sufficient to inform treatment decisions and guideline development as the evidence needs to be contextualised and patient values and preferences need to be considered. Quantitative benefit-harm assessments (BHA) have become more common to address this gap. BHA methods are commonly based on aggregated data which have several limitations. For example, most existing methods do not explicitly consider that benefit and harm events are not independent within individuals and that the benefit-harm balance may change over time.
Objectives: Our aim was to develop a novel method for determining the benefit-harm balance over time based on individual patient data, using SPRINT, a randomised clinical trial that compared systolic blood pressure (BP) targets of 140 to 120 mmHg, as an example.
Methods: We developed a model of health utility over time to assess benefits and harms on a common scale. In

collaboration with patient and caregiver-focus groups, we determined clinically relevant outcomes for inclusion in the analysis. The model is a step function on a scale of 0 (death) to 100 (perfect health), where the utility drops when an event occurs and may return to the previous level if there is recovery. We set the baseline-utility value for each patient according to age, gender and baseline renal function. We defined drops in utility due to an event with empirical disability weights.
Results: Figure 1A shows that mean health utility decreased from 89.8 in both groups [95% CI 89.5 to 90.0] by 4.4 [95% CI 4.1 to 4.7] units in the intensive BP control group and by 5.4 [95% CI 5.0 to 5.7] in the standard BP control group. Over 4 years, the 95% confidence interval of the difference in mean health utility (Figure 1B, grey area) is always within ± the minimal important difference of 3.80. Thus the two BP strategies were clinically equivalent at a significance level of ≈2.5%.
Conclusions: This novel method for BHA over time based on individual patient data showed that taking into account not only the benefits, but also the harms of a lower BP target, the two BP targets yield clinically equivalent outcomes over 4 years.

Attachments: Figure1.png

1043

Oral administration of Chinese herbal medicine during gestation period for preventing hemolytic disease of the newborn due to ABO incompatibility: A systematic review of randomised-controlled trials

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Background: About 85.3% of hemolytic disease of newborn (HDN) is caused by maternal-fetal ABO blood group incompatibility, however, there is currently no recommended 'best' therapy for ABO incompatibility during gestation.
Objectives: To systematically assess the safety and effectiveness of oral administration of Chinese herbal medicine (CMH) on preventing HDN due to ABO incompatibility.
Methods: The protocol of this review was registered on the PROSPERO website (No. CRD42016038637). Six databases were searched until April 2016. Randomised-controlled trials (RCTs) of CHM for maternal-fetal ABO incompatibility were included. The primary outcome was incidence rate of HDN. The risk of bias of the Cochrane Handbook was used to assess the methodological quality of included trials. Risk ratio (RR) and mean difference with a 95% confidence interval were used as effect measures. Meta-analysis was used by Revman 5.3 software if sufficient trials without obvious clinical or statistical heterogeneity were available.
Results: A total of 28 RCTs with 3413 women were included in the review (Fig 1). The majority of them have unclear or high risk of bias (Fig 2). The results found the HDN rate and the incidence of the icterus neonatorum of the newborn in herbal medicine group might be 70% lower than in usual care group (RR from 0.25 to 0.30, Fig 3-5); herbal medicine may increase twice numbers (RR from 2.15 to 3.14, Fig 6) of the women whose antibody titer lower than 1:64 after treatment compared to usual care; umbilical cord blood bilirubin in herbal medicine group would be 4umol/L less than usual care; and no difference of Apgar scores or weight of the newborn between groups.
Conclusions: This review found very low-quality evidence of CHM with function of clearing heat and draining dampness for maternal-fetal ABO incompatibility on preventing HDN (Table 1). No firm conclusion could be draw for the effectiveness or safety of CHM for this condition.

Attachments: Figure 1 Study flow chart.jpg, Figure 2 Risk of bias summary for each trial.jpg, Figure 3 Forest plot for incidence rate of HDN.jpg, Figure 4 Funnel plot for three outcomes.jpg, Figure 5.jpg, Figure 6 Forest plot for antibody titer value.jpg, Table 1 Summary finding table.pdf

1044

A systematic review of safety issues and reporting quality of mesenchymal stem cell therapy in clinical research

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Introduction: Mesenchymal stem cells (MSCs) are being applied in clinical trials of various conditions. Overall, MSC has been considered safe when its safety was evaluated based on MSC therapy research articles published thus far. It is difficult, however, to confirm from the published papers if it is considered safe due to not reporting adverse events (AEs) or systematically monitoring of them. Without any protocols for a long-term follow up planned beforehand, evaluating MSC safety based just on previously published studies may be inappropriate. Therefore we conducted a systematic review of clinical trials that examined the use MSCs to evaluate their safety.
Methods: MEDLINE, EMBASE, and the Cochrane Central Register of Controlled Trials were searched from inception to October 2016. The primary outcome long-term adverse events (AEs) were counted from the all published article including case reports. Compared to control, how many were AEs observed in MSC treatment group. Methodological qualities of Safety outcome reporting were evaluated using questions from the McHarm quality assessment scale for AEs. Outcome data were analysed by using R, and presented as the pooled incidence rates of AEs or Odds ratios and 95% confidence intervals.
Results: Of 299 studies, 6 studies were reported tumour occurrence including benign mass, calcification, and ectopic tissues after MSC treatment. Of 299, 136 were controlled studies. Compared to control, MSC treatment more occur infection (OR=2.02, 95%CI: 1.61 to 2.53). Over 50% studies neither reported nor mentioned whether AEs occurred or not. Based on the Mcharm assessment, the majority of the studies did not report AEs appropriately. Conclusion: Based on the current systematic review, MSC therapy appears to be safe. However, further MSC of safety must be explored through clinical studies based on the research design that allows for not only systematically monitoring its safety but also reporting whether it occurs or not to establish the appropriate safety profile of MSCs. This research was supported by a grant (10172MFDS993) from Ministry of Food & Drug Safety in 2014

1045
Evaluating a suite of Cochrane HIV reviews

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Background: In 2015 the Cochrane Infectious Diseases Group took over stewardship of the HIV/AIDS review portfolio.
Objectives: We developed a method for rapid appraisal and evaluation of individual reviews and protocols.
Methods: Each review or protocol was assessed by two editors using a tool which contained three assessment domains; quality appraisal, editorial evaluation and priority rating. The quality appraisal was based on adherence to five key MECIR standards. The editorial evaluation, included; 1) the approach to the question, 2) the quality of the writing, 3) the need for editing, and 4) the amount of editorial support required. The priority and importance of the question was ranked based on existing literature and liaising with experts. The combined assessment of these three domains contributed to the overall decision on the protocol or review. Decisions related to updating of reviews were reported in accordance with the Cochrane Updating Classification System.
Results: Thirty-eight protocols and 115 systematic reviews were published in the Cochrane Library by the Cochrane HIV/AIDS Group between 2001 and 2015. After appraisal 29 (76%) of protocols were earmarked for withdrawal from the library. This was mostly due to outdated review questions (Figure 1). Additionally, 19 of the 29 withdrawn protocols were assessed as low quality. To date, 43 of the 115 published reviews have been appraised. We aim to have this process completed within six months. Similar to the protocols, 70% of the

evaluated reviews were not eligible for updating due to poor methodological quality or changes in the topic area which made the review questions low priority (Figure 1).
Conclusions: We propose rapid-appraisal tools that allow for both the assessment of quality and relevance of new protocols and review updates when evaluating a review portfolio. For HIV, we know that interventions and priorities change rapidly, authors and editorial teams therefore need to work efficiently to produce reviews before questions lose relevance.

Attachments: flow diag.pdf

1046
Author instructions of haematology and oncology journals: A cross-sectional and longitudinal study

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Background: The debate about the value of biomedical publications led to recommendations for improving reporting quality. It is unclear to what extent these recommendations have been endorsed by journals. Objective: We analysed whether specific recommendations were included in author instructions; which journal characteristics were associated with their endorsement; how endorsement of the domains changed; and, whether endorsement was associated with change of impact factor between 2010 and 2015.
Methods: We considered two study samples consisting of 'haematology' and 'oncology' journals of the Journal Citation Report 2008 and 2014, respectively. We extracted information regarding endorsement of the recommendations of the International Committee of Medical Journal Editors, of reporting guidelines, requirement for trial registration and disclosure of conflicts of interest. Data extraction was done by reading the author instructions and conducting a text search with keywords. We calculated a global generalised linear mixed-effects model for endorsement of each of the 4 domains followed by separate multivariable logistic-regression models and a longitudinal analysis. We defined endorsement as the author instructions saying that they approve the use of the recommendations.
Results: In 2015, the ICMJE recommendations were mentioned in author instructions of 156 journals (67.5%). CONSORT was referred to by 77 journals (33.3%); MOOSE, PRISMA, STARD and STROBE were referred to by less than 15% of journals. There were 99 journals (42.9%) that recommended or required trial registration, 211 (91.3%) required authors to disclose conflicts of interest. Journal impact factor, journal start year and geographical region were positively associated with endorsement of any of the 4 domains. The endorsement of all domains increased between 2010 and 2015. The endorsement of any domain in 2010 seemed to be associated with an increased impact factor in 2014. Conclusion: Haematology and oncology journals endorse major recommendations to various degrees. Endorsement is increasing slowly over time and might be positively associated with the journal's impact factor.

1047
Characteristics of clinical trials on drug-drug interaction registered in the ClinicalTrials.gov from 2005 to 2015

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Background: Drug-drug interactions (DDIs) underlie 15-20% of adverse-drug reactions requiring hospitalisation and have caused several market withdrawals due to related adverse events (AEs). More prevalent polypharmacy in ageing populations and increasing numbers of chemical entities emphasise the need for clinical studies of DDIs.
Objectives: To review the characteristics of clinical trials on DDIs and assess their registered and published safety data in a publicly available trial register.
Methods: We performed an observational study of clinical trials retrieved from ClinicalTrials.gov by using the search term 'drug-drug interaction' (search performed on 16 October 2015). Trials were included if they were: 1) investigating the DDIs; 2) had a ClinicalTrials.gov registration number; 3) closed and completed in October 2015; 4) registered between 23 June 2005 and 16 October 2015. Publications were identified through CT.gov, PubMed and SCOPUS. Data on 8 items from the World Health Organization minimum dataset on AEs were abstracted by one author and verified by another.
Results: Among the 2059 retrieved clinical trials, 762 were excluded because of the incorrect classification as related to DDIs. Most were industry-sponsored (65%), started before registration (57%), and were primarily interventional studies (96%) in phase I (72%). Only a few studies had registered results (13%), among which 23% registered occurrence of serious and other AEs. 71 trials (5%) had both registered and published data (Table 1). Reported SAE and OAE description, frequencies and/or absolute numbers were identical to registered data for only 17 trials (24%).
Conclusions: We found a remarkably low rate of reporting of study results and AEs, as well as high discrepancy between registered and published AEs. Immediate efforts of all stakeholders to improve transparency are needed, as well as more stringent regulatory requirements for trial registration and drug marketing authorisation for DDIs.

Attachments: Table (1).pdf

1048
Indian consumer participation in primary research based on the Cochrane Library Access

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Background: Indian Cochrane contributors have contributed tremendously to primary research because of open, unlimited access to the Cochrane Library. Primary international research has had greater impact due to free access to the Cochrane Library. We arrived at this conclusion by studying the pattern of usage and knowledge of evidence-informed healthcare among primary researchers and consumers. We analysed the outcome in primary research along with the usage statistics of consumers using the evidence-based informed decisions and asking 'to what extent' in India.
Objectives: To evaluate the citation of Cochrane Reviews in Indian medical journals during the provision of the national subscription and compare the usage statistics of the Cochrane Library for 5 consecutive years.
Methods: We identified all RCTs and CCTs published in Indian medical journals from 2011 to 2015 from the SADCCT (www.cochrane-sadcct.org). Full texts were searched for citations from the Cochrane Database of Systematic Reviews. Independently, we also evaluated the total and annual number of Cochrane Reviews cited which included the proportion of citing journals; and the corresponding year's text downloads and abstract views of the Cochrane reviews through Wiley.
Results: In Table 1, from year 2011 to 2015, 639 RCTs and 421 CCTs were published in 66 Indian medical journals, which cited 105 Cochrane Reviews in RCTs and 31 Cites of Cochrane Reviews in CCTs with an increasing trend from 2011 to 2013 (image 1). A decreasing trend was evident from 2014 to 2015 in the absence of national subscription access to the Cochrane library, whereas the text downloads and abstract's view of the Cochrane library in (image 3) showed a rise from 2011 to 2013 with a decreasing trend in the abstract view, but a gradual increase in the text downloads. In analysing access to the library, the majority has been the institutional and the ICMR gateway (Table

2) on the access of the evidence (image 4)
Conclusions: Access to consumers to the Cochrane Library requires more marketing on the Indian Continent.

Attachments: Table 1.jpg, Image 1.jpg, Image 2.jpg, Table 2.jpg

1050
Development of an English Health-Related Quality of Life (HRQoL) instrument for very young children, to be completed by proxy

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Background & Aims: There is an increasing awareness that, in order to monitor health outcomes both mortality and morbidity need to be assessed. A common metric used to measure morbidity and functional limitation is the Quality adjusted life year or QALY, which incorporates time spent in a health condition and HRQoL (1). This is of increasing importance in low-income countries where programmes have been implemented to address the high burden of child mortality. The 'first 1000 days' is one such initiative adopted by the WHO to improve nutrition, healthcare and social support for both mother and child. One of the aims is to improve quality of life during this vulnerable period (2). As there is currently no appropriate HRQoL measure for this age, we set out to develop a HRQoL instrument for children from 1 month to 3 years old, amenable to the elicitation of preference weights.
Methods: The beta draft of the instrument was based on a systematic review of HRQoL measures for children and the results of cognitive interviews with caregivers of very young children who completed the EQ-5D-Y, an existing validated HRQoL measure for older children. The caregivers were requested to identify items to be considered for inclusion, wording and layout of the new measure. The item pool generated from the literature reviews and cognitive interviews were assessed through a Delphi study. These items were further reduced through development of a preliminary measure, subsequent testing, reduction of items and retesting. Results &
Conclusions: The methodology used to identify candidate items was rigorous and resulted in a smaller core set to be tested. Items were developed to be observable with dimension descriptors referring to 'age-appropriate behaviour'. Caregivers appear to be able to reliably report on HRQoL of their very young children. It seems that it is unnecessary to develop different measures for different age children as long as there are appropriate descriptors. Thus, the possibility of developing a valid and reliable proxy version for infants and toddlers appears very promising. It is recommended that the beta draft be tested for validity and reliability.

Attachments: References.pdf

1051
The EQUATOR Network 2006-2016: A decade of promoting reporting guidelines to improve the health research literature

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Improving research publication and dissemination processes is directly linked to more transparent, reproducible and usable research. Reporting guidelines are simple tools that can help researchers to report every important detail about their study when writing a paper. Reports that follow these reporting recommendations are easier to assess and use in systematic reviews, clinical guidelines and practice; reporting guidelines ensure that research papers can be used by all health research stakeholders. The EQUATOR (Enhancing the QUAlity and Transparency Of health Research) Network (www.equator-network.org) is an international initiative founded in 2006 to improve

the reliability and value of published health research literature. We support transparent and accurate reporting by collecting published reporting guidelines, promoting their use, and developing resources and training for health researchers. There have been extensive changes in the research reporting landscape over our first 10 years of operation. We have collected over 350 reporting guidelines available in our database, developed by international groups of experts in response to identified problems in reporting in certain study types or clinical areas. Many journals and funders now endorse the use of reporting guidelines, in some case requiring researchers to use them. We will summarise the latest research on the quality of the published scientific literature and the impact of reporting guidelines, showing a slow but clear improvement. We will present the EQUATOR Network's body of work over the past decade, focusing on our expanding online resources, extensive training programme, and collaborations with organisations such as the Pan American Health Organisation. We will also introduce our new EQUATOR collaboration programme, inviting researchers, policy makers, editors, peer reviewers, consumers, activists, students, lecturers, and anyone interested in improving the quality of research reporting and research itself to join us in promoting reporting guidelines and good research reporting.

1052

Sex/gender analysis in Cochrane reviews of healthcare-associated infections is uncommon

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Background: Sex and gender differences are often not considered in research design, study implementation and reporting. This limits the applicability of research findings to decision making. Cochrane reviews are important to transfer research knowledge into policy and clinical practice. However, the lack of a sex and gender-based analysis (SGBA) in Cochrane reviews may represent a barrier to support informed decision making.
Objectives: To describe the extent to which SGBA is considered in Cochrane reviews of interventions for preventing healthcare-associated infections (HAIs).
Methods: Study design: 'methodology study'. We searched the Cochrane Database of Systematic Reviews for active reviews published before 1 January 2017. We screened 6694 records and included those reviews evaluating any intervention attempting to prevent HAIs or healthcare colonisations. At least two reviewers independently participated in the selection and extraction processes by using predefined forms in EPPI-Reviewer 4 software. To extract key information about sex and gender we considered the domains of the 'Sex and Gender in Systematic Reviews Planning Tool' (SGSR-PT).
Results: A preliminary analysis of 59 included reviews showed that SGBA was generally absent. No review met all of the SGSR-PT criteria. Sex and gender terms were used interchangeably. The background never described the relevance of sex/gender to the review question and the data were disaggregated by sex in only 2 reviews. There were subgroup analyses by sex in only 3 reviews, and no review highlighted any sex/gender research gaps.
Conclusions: SGBA was practically absent in Cochrane reviews on prevention of HAIs. This raises concerns about the quality and applicability of these reviews, and highlights that there is much room for improvement to support informed decision making in this field.

1053

Clinical research evidence of the association between depression and diabetes: A systematic literature review

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Background: Early studies had suggested that depression is strongly and robustly associated with incidence of diabetes. It has been hypothesised that diabetes may increase the risk of depression, but there has been no evidence-based clinical evaluation of this hypothesis.
Objectives: We therefore examined the overall clinical research evidence to show whether the hypothesis is true.
Methods: We conducted a search using PubMed, Cochrane Library and 4 Chinese electronic databases for publications till January 2017. Reviewers assessed the eligibility of each study by exposure/outcome measurement and study design. Only case-control/cohort studies of depression and diabetes that excluded prevalent cases of depression (for diabetes predicting depression) were included. The methodological quality of studies was evaluated by the risk-of-bias tool quality of NOS (NewCastle-Ottawa Quality Assessment Scale)/CASP (Critical Skills Appraisal Programme).
Results: Seventeen clinical studies were identified published till January 2017,including 4 cohort studies, 2 case-control studies and 11 cross-sectional studies. These studies included a wide spectrum of diabetes including Gestational diabetes mellitus, Elderly diabetes and Type-2 diabetes. All 4 cohort studies showed that the diabetes-depression association is bidirectional. Two cohort studies and 2 cross-sectional studies showed that patients with Gestational diabetes mellitus had more probability of being diagnosed with depression.Two case-control studies and two cross-sectional studies showed that diagnosed diabetes was associated with increased risk of developing elevated depressive symptoms. Some another studies showed that depressive symptoms in patients with diabetes were associated with some factors, like age, gender, marital status and education.
Conclusions: Our results showed that diabetes mellitus can increase the risk of serious outcomes of depression, such as suicide and hospitalisation, and future research should focus on identifying mechanisms linking these conditions.

Attachments: Figure 1. Flow-chart of study selection.png

1054
Comparative effectiveness of treatment options for subacromial shoulder conditions: A network meta-analysis

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Background: Subacromial shoulder conditions (SSCs) account for nearly 70% of all shoulder pain presentations to primary care, affecting one in three persons, half of whom still report pain and functional limitations 12 months post initial diagnosis. Various treatments are available for management of SSCs, but clinical decision making is complex due to limited evidence on comparative effectiveness of treatments. This network meta-analysis (NMA) aimed to combine evidence on direct and indirect treatment comparisons to determine the comparative effectiveness of treatments for improving pain and function in SSC patients.
Methods: Bibliographic databases were searched till August 2016 to identify randomised trials comparing interventions for adults with SSCs. Using predefined inclusion and exclusion criteria, titles, abstracts and full texts were independently screened by two reviewers. Quality of trials was assessed using the Cochrane Risk-of-Bias Tool, and extracted data regarding study characteristics and results were independently checked. A random-effects NMA is currently being undertaken. Effectiveness of interventions will be summarised using pooled-effect estimates, 95% confidence intervals and intervention rankings for pain and function at various follow-up times. Clinicians and patients with SSCs formed an advisory group contributing to study design, interpretation and dissemination of findings.
Results: 142 trials of 21 different treatments for SSCs were identified. Networks are currently being developed. The largest network including 53 trials and 17 treatments will summarise evidence for short-term comparative effectiveness on pain. Considerable heterogeneity is observed, partly due to studies offering treatments in combination or in isolation, and wide variation in follow-up times. Given the large number of trials with small sample sizes, the risk of small study bias will be assessed. Analysis is ongoing and results will be presented at the Summit.

Conclusions: A summary of evidence on the comparative effectiveness of conservative and surgical interventions in the management of SSCs will provide further insight to inform clinical decision making.

1055

Performance of the Framingham risk models and pooled cohort equations: A systematic review and meta-analysis

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Background: The Framingham risk models and Pooled Cohort Equations (PCE) are widely used for predicting the 10-year risk of developing coronary heart disease (CHD) and cardiovascular disease (CVD), respectively. Over the past few decades, these models have been extensively validated across different settings and populations. However, no efforts have yet been made to formally synthesise the evidence on the predictive performance of these models and to assess their potential generalisability across different subgroups and geographical regions.
Objectives: To systematically review and summarise the predictive performance of 3 common cardiovascular risk prediction models (Framingham Wilson 1998, Framingham ATP III 2002 and PCE 2013), and to determine sources of heterogeneity.
Methods: A search was performed in December 2015, to identify studies investigating the predictive performance of the aforementioned models. Studies were eligible for inclusion if they validated the original prediction model separately for men or women, to predict its respective clinical outcome in the general population. Performance estimates (observed expected (OE) ratio and c-statistic) were summarised using random effects models and sources of heterogeneity were explored using meta-regression.
Results: The search identified 820 references, of which 29 were included, describing 82 validations. Results indicate that, on average, all models overestimated the risk of CHD and CVD (Figure). Overestimation was most pronounced for high-risk individuals and for European populations. Discriminative performance was better in women for all models. There was considerable heterogeneity in the c-statistic (range pooled estimates 0.64-0.73), likely due to differences in patient spectrum across studies.
Conclusions: The Framingham Wilson, ATP III and PCE have adequate discriminative ability but all overestimate the risk of developing CHD or CVD, especially in European and high-risk populations. Future research should focus on facilitating strategies to tailor these prediction models to specific populations, rather than developing more models that are based on the same or similar predictors.

Attachments: Forest plot OE ratio.png

1056

Stimulating evidence-based healthcare in The Netherlands

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Background: How to get evidence into practice is a continuous challenge. The current focus is mainly on advanced methods of evidence synthesis more suitable for practice, as well as improving guideline adherence. But also, the absence of evidence should be of concern. Like in other countries a substantial part of the

recommendations in Dutch guidelines is based on low- level evidence. Research should be done on a wide scale to solve the knowledge gaps in guidelines and thereby determine which healthcare is most effective under the given circumstances. This will create value for patients.
Methods: Given the large number of knowledge gaps in medical practice, it is important to prioritise them in an agenda for research. Extensive involvement of medical specialists, patients, hospitals and healthcare insurers in prioritising and in conducting studies ensure that the results of studies become widely accepted and quickly implemented in daily practice. This approach is part of Choosing Wisely Netherlands Campaign, which aims to stimulate effective care.
Results: At this moment 10 of the 30 societies of medical specialists in The Netherlands have established an agenda for research on the basis of knowledge gaps in guidelines. These agendas have lead to several research studies, some of which have already led to updated guidelines. At the Summit, we will give an example pertaining to adenotonsillectomy (ATE).
Conclusions: This method is promising for improved underpinning of medical practice and therefore stimulates evidence-based healthcare in The Netherlands. In addition, this method also stimulates effective care and yields health benefits for patients.

1058
The methodological quality of the traditional Chinese medicine clinical pathway in China

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Background: Thousands of clinical pathways (CPs) have been developed in China to assure quality, reduce risks, increase resource efficiency and control costs.
Objectives: To evaluate the methodological quality of traditional Chinese Medicine (TCM) CPs with the Integrated Care Pathway Appraisal Tool (ICPAT).
Methods: A systematically search of the Chinese Biomedical Database (CBM), China National Knowledge Infrastructure (CNKI), and the Wanfang Database was conducted from inception to February 2017. In this study, we extracted relevant characteristic information, and evaluated the methodological quality of TCM clinical pathways with ICPAT.
Results: A total of 27 TCM CPs were included. The publication years ranged from 2010 to 2016. 74.1% (20/27) of TCM CPs were developed based on published guidelines. The evaluation of ICPAT showed that all of the TCM CPs identified the relevant patients in the title; about 22% (6/27) of TCM CPs reported references; 18.5% (5/27) of TCM CPs conducted a literature search, which indicated these CPs were evidence based during the developing process; and, 30% (7/27) of TCM CPs conducted a pilot test before formal publication.
Conclusions: Our study demonstrated that most of the TCM CPs were of low methodical quality which suggested that more effort should be made to improve the quality of TCM CPs according to ICPAT.

Attachments: The methodological quality of Traditonal Chinese Medicine clinical pathway in China.pdf

1059
Reporting quality appraisal of clinical practice guidelines on pancreatic cancer

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Background: Clinical practice guidelines (CPGs) are of great importance to the treatment by clinical physicians, so the quality of CPGs would be an essential issue for clinical work. As a consequence, adaptation of high-quality existing guidelines should be a very important job to fulfill perfect clinical practice. Though pancreatic cancer is being increasingly detected, its evaluation and management are still debated and the CPGs are unclear. Therefore, It is very necessary to determine the quality of CPGs on pancreatic cancer. The RIGHT (Reporting Items for practice Guidelines in Healthcare) checklist consisting of 22 items can assist guideline developers in reporting guidelines, support journal editors and peer reviewers when considering guideline reports, and help healthcare practitioners understand and implement a guideline.
Objectives: To analyse available CPGs on pancreatic cancer with RIGHT checklist in order to evaluate their reporting quality.
Methods: We systematically searched electronic databases including PubMed, Cochrane Library, the Chinese National Knowledge Infrastructure, the Chinese Biomedical Literature Database, the Chinese National Knowledge Infrastructure WanFang Database from the inception to February, 2017. The Guidelines International Network database, the National Guideline Clearinghouse, the Scottish Intercollegiate Guidelines Network, National Institute for Health and Clinical Excellence and Google also were searched to identify additional potentional guidelines. The RIGHT instrument was used by two independent assessors to create a systematic appraisal in 22 items to determine the guidelines fulfilling the inclusion and exclusion criteria. We assessed each item was rated as 'Yes' for total compliance, 'Unclear' for partial compliance or 'No' for non-compliance, respectively. The number and proportion of reported items for each items were also calculated. Statistical analyses were produced using SPSS version 15.0 for Windows. Results and
Conclusions: This study is ongoing and results will be presented at the Summit as available.

Attachments: Reporting quality appraisal of clinical practice guidelines on pancreatic cancer.pdf

1060

‘Mindlines’ or ‘Bricolage’ - An ethnographic study of the social organisation of practice nurses' knowledge use

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Background: Changes in healthcare delivery, particularly in primary care, have resulted in changes to practice nurses’ (PNs) roles. Macro-level policy has focused increasingly on standardisation of care within the primary care environment, specifically in relation to management of chronic/long term conditions. Practice nurses have additionally taken on roles that include diagnostic and treatment elements for which they were not prepared for in their initial training.
Objectives: Do practice nurses make use of evidence-based guidelines (written and/or interactive) to inform the clinical encounter? What other information sources do PNs use and what rationale do they provide? How does context, specifically cultural and organisational issues influence knowledge utilisation?
Methods: Ethnographic data were generated relating to meso-level organisation of knowledge utilisation in 2 study sites. Interviews, observation and documentary analysis of available knowledge sources including guidelines and protocols were used to generate data relating to how knowledge is accessed and subsequently used at the micro level of the clinical patient encounter.

Results: Findings illustrated that a mixture of organisational and individual factors impacted on knowledge utilisation. Practice nurses used a combination of knowledge which they applied within the context of the individual patient encounter. This was accessed partly through their 'mindlines' developed from education, clinical experience and social learning, and partly through accessing a 'bricolage' of knowledge which included seeking advice from a variety of sources.
Conclusions: Social learning influences the growth and development of knowledge, development of more formal multidisciplinary networks or communities of practice has the potential to enhance dissemination. Strengthened networking would encourage horizontal dissemination and provide the opportunity for all parties to discuss externally received information and translate it into a form that is useful for practice. Primary care practices should increase the opportunity for horizontal networking between members of the primary care team.

1061

Men's perceptions of the physical consequences of a radical prostatectomy on their quality of life: A qualitative systematic review

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Background: Prostate cancer is the most common male cancer and second-most common cause of cancer death in men in the Western world. Compared to other prostate cancer treatments many trials report worse urinary incontinence and sexual function and similar bowel function among men with prostate specific antigen detected prostate cancer who underwent radicalised prostatectomy (RP).
Objectives: To identify men's perceptions of the impact of the physical consequences of a RP on their quality of life.
Methods: This review considered studies that focused on qualitative data, included men of all ages and nationalities who had a RP as treatment for prostate cancer, and investigated the psychosocial implications of the physical consequences of RP and the impact of these consequences on quality of life and life experience, as identified by the men. Standardised Joanna Briggs Institute methods were used.
Results: Eighteen qualitative studies were included in the review. The five aggregated syntheses were: Urinary incontinence (UI) is a significant problem for which men feel ill prepared, UI causes feelings of powerlessness and negatively impacts on social life and life experience. Healthcare professionals should understand the impact and consequence of UI and implement support interventions to ensure that the negative impact on life experience is minimised. Erectile Dysfunction (ED) has the greatest impact on men post RP, affecting sexuality and masculinity and causing anxiety, loss and grief. Acceptance was demonstrated in a number of ways, reconciliation, adaptation and compensation for being rid of the cancer. Men's relationships were affected post RP, communication and support from partners was essential and different ways of establishing a sexual relationship were identified. Pre and post-operative support interventions are essential. Healthcare professionals should provide appropriate information and encourage men to ask about the support they require.
Conclusions: Urinary incontinence and ED are significant side effects of radicalised prostatectomy which have a negative impact on men's quality of life and for which they feel ill prepared.

1062

Domestic abuse risk assessment: evaluation of a new assessment tool for the police

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Background: Globally, domestic abuse is a serious and widespread problem. Within the UK, it is estimated that

the police service receives, on average, over 100 domestic abuse-related calls an hour. A recent study of the police response to domestic abuse in England and Wales found inconsistencies in the way police officers assess the level of risk. In particular, officers sometimes fail to recognise abuse that isn't characterised by overt physical violence (Robinson et al. 2016). The ability to accurately identify abuse and assess risk is vital for victims and perpetrators to receive the most appropriate intervention. In response to these findings, the College of Policing developed a risk-assessment tool for use by frontline police officers when responding to domestic-abuse incidents. The risk-assessment tool was piloted and evaluated in 2017.
Objectives: The purpose of the pilot was to assess whether the new risk-assessment tool could improve the accuracy of risk identification and subsequent risk assessment and in doing so, direct officers towards prioritising cases where there is an ongoing pattern of abusive behaviour.
Methods: The pilot took a quasi-experimental approach using a non-equivalent group design. The new risk-assessment tool was piloted in specific areas of 3 police forces, while comparison areas continued to use an existing risk-assessment tool. Fieldwork comprised direct observations of frontline officers undertaking risk assessments, in-depth interviews with police officers, staff and partners, and a review of case-file data. Results and
Conclusions: Key findings and implications for future practice will be discussed.

1063
Hidden voices: Towards participant-led research in gender-based violence

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Background: Gender-based violence (GBV) is recognised as a global health and societal issue (World Health Organization, 2017). There is a growing body of evidence surrounding the impact of GBV on the lives and health of those affected. However, to date much of the research undertaken in this field has focused on researcher led or professional accounts and, as such, the voice of survivors has largely been absent. The rationale for the paucity of survivor voices within the GBV discourse generally may be due to a number of reasons including the sensitivity and hiddenness of the field of enquiry. However, it is also recognised that survivor accounts are pivotal for deepening understanding of this phenomena and for the development of effective services and responses by those responsible for providing care and support (Recchia & McGarry, 2017).
Objectives: The aim of the presentation is to report on the methodology, approach, successes and challenges of undertaking two participant-led research projects with survivors of GBV.
Methods: The two research projects utilised an overarching, arts-based research approach which involved the creation of artefacts – poems, clay poetry and narratives – in a workshop environment.
Results: The findings from this research have formed the basis for a series of global, open-access e-learning resources for health and social care professionals.
Conclusions: The use of arts-based research in exploring the lived experience of individuals is recognised within post-modern qualitative research methods and in the current context successfully gave primacy to the voices of the women over those of the researchers. References: Recchia N & McGarry J. (2017) 'Don't Judge Me': Narratives of living with FGM International Journal of Human Rights in Healthcare. (In Press.) World Health Organisation (2017) http://www.who.int/mediacentre/factsheets/fs239/en/

1064
Routine Health Information System (RHIS) interventions to improve health systems management: An EPOC-Cochrane effectiveness systematic review

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Background: A well-functioning routine health information system (RHIS) provides informational support at all levels of health management: operations, planning, policy making, surveillance and quality improvement. Poor information support is a major obstacle. Given its centrality, there is a need for an up-to-date systematic review on the effectiveness of RHIS interventions for health systems management. Aim: This review assesses the effects of interventions to improve RHIS for health systems management. The objectives are: 1) to describe intervention types; 2) to assess the effectiveness of RHIS interventions; and, 3) to better understand the context of RHIS effectiveness studies. Method: The following methodological standards are being employed to ensure scientific rigour: independent, double screening of abstracts; assessing risk of bias of included study designs, and assessing quality of evidence for each key outcome using the GRADE approach. The Performance of Routine Information Systems Management framework will guide the analysis.
Results: We reviewed 12 265 abstracts and are in the process of reviewing full texts. We will report findings of included studies: their intervention types, effectiveness to improve RHIS and health systems management; health status and population health outcomes; and secondary outcomes (equity and adverse events). Where feasible, we will report contextual factors influencing RHIS intervention outcomes. If we cannot pool study results because settings or interventions are too heterogeneous, we will describe findings using a structured synthesis.
Conclusion: Being able to access and use sound data from good information systems is crucial to health systems functioning; more so for low- and middle- income countries where health indicators are poor. Our findings will be used to assist policy makers and managers in their information systems choices, by offering synthesised evidence as to which RHIS improvement interventions are most effective.

1065

Identifying global priority areas for systematic reviews in Chronic Otitis Media – the importance of stakeholder engagement

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Background: Although prioritising topics for systematic reviews is recognised as being important to ensure relevance and to minimise research waste, there are no standardised methods, especially for non-guideline development bodies. In 2017, we completed a project to prioritise a suite of proposals for Cochrane reviews in chronic otitis media (COM). COM is chronic inflammation of the middle ear with ear discharge through a tympanic-membrane perforation. Incidence is higher among children and people in lower- and middle-income countries, and from certain ethnic groups.
Objectives: To present a systematic and collaborative scoping process to identify the priority areas for Cochrane systematic reviews in COM.
Methods: The scoping process comprised four stages: 1) Understanding the global clinical context; 2) Identifying the existing synthesised evidence and identifying variation in practice; 3) Mapping current research evidence through searches of primary studies; and, 4) Engaging stakeholders globally in a formal consultation process.
Results: Stages 1-3 were essential to provide insight into issues around the condition and possible

methodological challenges. On completion of these stages, a list of reviews was identified and 6 reviews were prioritised, but some uncertainties remained. The stakeholder consultation helped confirm the proposed list, and highlighted that a seventh review was needed to address an area with wide variations of practice across different countries. Stakeholders were keen to be involved and responsive to the consultation process. Some required help with evaluation of factors for prioritisation.
Conclusions: A systematic scoping process is important to identify priorities for reviews relevant to patients and others involved in patient care. It increases the efficiency of the review process by identifying and resolving possible methodological issues at the pre-protocol stage. Adding global stakeholder consultation is invaluable to provide a broader global perspective and helps to resolve areas of uncertainties and identify priorities in areas less familiar to the core reviewing team.

1066
Potential of Cochrane reviews to inform self-care: Developing a model for a systematic assessment

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Background: Self-care describes how people assess, treat and manage their own health. With increasing and unsustainable burdens on healthcare systems, facilitating self-care of long-term conditions is increasing in priority. Cochrane reviews cover a wide range of health interventions but it is not clear to what extent Cochrane reviews inform and support self-care for common, long-term health conditions.
Objectives: To develop a model/pilot a process for assessing the potential for Cochrane reviews to inform self-care and to identify possible 'review' gaps.
Methods: For this pilot, we focused on depression and anxiety, and screened all records from the Cochrane Common Mental Disorders Review Group to identify relevant reviews. We defined self-care as interventions that could be selected and applied without the assistance of a practitioner. Two authors independently screened titles and abstracts and then the full text of all potentially relevant reviews, with disagreements resolved by discussion. We extracted data into a predefined extraction form: review details, population, intervention, main comparison(s), numbers of studies and participants, meta-analyses, conclusions, relevance to self-care. The list of interventions was compared with surveys of use of self-care approaches.
Results: 234 records were retrieved and 186 were excluded at title/abstract stage. After full-text screening, 20 records were excluded, 7 (protocols) remained unclear and 21 were included; 15 focused on depression, 5 on anxiety and 1 on both. The interventions were mainly herb/diet supplements, psychological and mind-body based. Ten therapies were judged effective or promising with small effect sizes in most cases but content and phrasing of conclusions varied considerably. Compared with self-care treatments used in practice, only a small number were addressed in Cochrane reviews.
Conclusions: This pilot has revealed the potential of Cochrane reviews to inform self-care and the variation in presentation of conclusions which would make this a challenge. A number of 'review' gaps were identified. The extension of this process to self-care for other conditions will be discussed.

1067
Objective impairments of gait and balance in adults living with HIV-1 infection: A systematic review and meta-analysis of observational studies

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Background: Gait and balance deficits are reported in people with living with HIV (PLHIV) and are associated with reduced quality of life. Current research suggests an increased fall-incidence in this population, with fall rates among middle-aged PLHIV approximating that in seronegative elderly populations. Gait and postural balance rely on a complex interaction of the motor system, sensory control and cognitive function. However, due to disease progression and complications related to chronic inflammation, these systems may be compromised in PLHIV. Consequently, locomotor impairments may result that can contribute to increased fall rates.
Objectives: To critically appraise and synthesise available evidence regarding objective gait and balance impairments in PLHIV, and to emphasise those which could contribute to increased fall risk.
Methods: This review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. An electronic search of published observational studies was conducted in March 2016. Methodological quality was assessed using the NIH Quality Assessment tool for Observational Cohort and Cross-Sectional Studies. Narrative synthesis of gait and balance outcomes was performed, and meta-analyses where possible.
Results: Seventeen studies were included, with fair to low methodological quality. All studies used clinical tests for gait-assessment. Gait outcomes assessed were speed, initiation-time and cadence. No studies assessed kinetics or kinematics. Balance was assessed using both instrumented and clinical tests. Outcomes were mainly related to centre of pressure (COP), postural reflex latencies, and timed clinical tests. There is some agreement that PLHIV walk slower and have increased COP excursions and -long loop postural reflex latencies, particularly under challenging conditions.
Conclusions: Locomotor deficits exist in PLHIV, but are currently insufficiently quantified. Results should be interpreted cautiously due to heterogeneity and low methodological quality. Future research involving more methodological uniformity is needed to better understand such deficits and to inform clinical decision making.

1068
Outcome switching in clinical trials – an analysis of the German Clinical Trials Register

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Background: Switching of outcomes in trials is a well-known problem in clinical research. It has been observed that clinical trial reports are often not identical with the protocol or registry entry of the study, especially with regard to the reporting of the outcomes. This problem leads to a lack of transparency in clinical research and misinformation.
Objectives: The objective is to assess the quality of register entries in the German Clinical Trials Register (DRKS) with regard to completeness and comprehensiveness, compared with the information in the publication.
Methods: Interventional trials which were registered in the DRKS (completed for >1 year, conducted in Germany) have been identified. A 10%-sample was drawn and analysed to see whether results have been posted in DRKS. After that we compared the information given in the register with the information provided in the journal publication. Interesting parameters to be compared are outcomes, inclusion and exclusion criteria.
Results: 55 out of 124 trials posted results in different formats (link to publications, uploaded reports, etc.). The evaluation of the data is currently in progress and the results will be published once they are available (but at the latest at the Summit).
Conclusions: Modifying data is a serious problem in medical research. It is advisable to ask the study investigator to publish all the data and make sure that they make amendments in the publication or study entries if any changes are required.

1069
Stakeholder involvement in selecting systematic review topics

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Background: This presentation discusses stakeholder engagement in selecting topics for Campbell Collaboration systematic reviews.
Objectives: Discuss methods for involving stakeholders in topic selection for American Institutes for Research (AIR)'s Center on Knowledge Translation for Employment Research (KTER Center) reviews.
Methods: Case Study 1: Cancer and the Americans with Disabilities Act (ADA) Methods included survey, and collaboration with policy analysts. To choose the topic for Fong et al. 2015, KTER staff drew on survey research of healthcare providers and individuals with cancer indicating their awareness of the ADA was low. Concurrently, partners at the Southwest ADA Center shared analysis of cancer-related ADA amendments. KTER conducted a systematic review of interventions to support employees with cancer and embedded findings into a webcast. Case Study 2: Traumatic brain injury (TBI) and use of a secret Facebook group Methods included survey, key informant interviews, and focus groups. To choose the topic for Graham et al. 2016, KTER staff surveyed rehabilitation researchers regarding the need for and feasibility of potential topics, and then interviewed directors of state vocational rehabilitation agencies regarding the researchers' selections. Concurrently, focus groups were conducted with individuals with disabilities regarding if and how they used research to acquire and maintain employment. Participants reported that social media was a platform of interest. The consequent intervention tested the use of a private Facebook group among individuals with TBI to promote the use of review findings.
Results: Case 1: Many participants already knew about the ADA. Follow-up interviews with indicated only sporadic need for the information. Case 2: Individuals with TBI participated in the platform, and it was effective in conveying webcast content, but did not affect their employment outcomes.
Conclusions: To ensure uptake, engaging stakeholders in topic selection is necessary but insufficient. Other barriers exist, such as cost to the user, relative interest in the platform,and frequency of need for the information.

1070
Does trial registration reduce research bias? A comparison of registered and unregistered trials in diabetes quality improvement interventions

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Background: The purpose of trial registration is to increase transparency and quality in the conduct of trials. Despite the implementation of the ICMJE policy on trial registration in 2005, many trials are still conducted without registration. It is unclear whether unregistered trials are at greater risk of bias than registered trials. In this study, we compare the characteristics of registered and unregistered trials of diabetes quality improvement (QI) interventions.
Objectives: To compare the study characteristics of unregistered and registered trials of diabetes QI interventions.
Methods: In a systematic review of diabetes QI interventions, we identified 140 trials published between 2010 and 2014. We identified the proportion of trials that were unregistered and compared characteristics of unregistered and registered trials including country of study conduct, source of funding, ethics approval, sample size, number of study arms, cluster- versus patient-level randomisation, blinding, study duration, number of outcomes reported and the statistical significance of the reported associations.
Results: We identified 50 (36%) trials that were not registered in a clinical trials registry. Compared to registered trials, fewer unregistered trials involved multiple arms (4% vs. 16%, $p<0.05$) and blinding of assessors (8% vs. 30%, $p<0.05$). We found no significant difference between unregistered and registered trials in mean sample size, mean length of follow-up, or the use of cluster randomisation.
Conclusions: This study indicates that despite the ICMJE policy, a large proportion of diabetes quality improvement trials published after 2010 remain unregistered. Methodological differences between unregistered and registered trials suggest that registration does improve the quality of trials.

1071
Current level of Campbell activities in China

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Background: The Campbell Collaboration is committed to the preparation and dissemination of high-quality systematic reviews (SRs) of research evidence on the effectiveness of social programmes, policies, and practices. The Campbell Library has become a widely accepted evidence-based database for decision making.
Objectives: To assess the current level of collaboration on Campbell activities in China and identify Campbell SRs conducted by Chinese authors.
Methods: We searched CNKI (China National Knowledge Infrastructure) with the term 'Campbell' to find studies about Campbell. Meanwhile, two independent members fully reviewed the SRs in the Campbell Library to screen Campbell SRs authored/ co-authored by researchers from its inception to January, 2017. Disagreements were solved by discussion. We abstracted the data, including type of study, publication year, institution, theme, etc. using a predesigned form in Office Excel 2013.
Results: We found fourteen Chinese papers about Campbell Collaboration or SRs published between 2002 to 2016. Among these studies, eight were reviews, four were reports on Campbell Conference, one was about how to conduct a Campbell SR and one was a translation about Campbell groups. The first authors were mainly from Chinese Cochrane Centre (8 of 15) and Chinese GRADE Centre (4 of 15), and most of these papers were published on the Chin J Evid-Based Med (10 of 15). For Campbell SRs, we found no SRs with authors from China.
Conclusions: Campbell Collaboration has been introduced into China, but the awareness and involvement in specific work among Chinese researchers is poor. We need to contribute to the dissemination and utilisation of Campbell SRs in the China.

1072
Building the research capacity of medical officers of the Government of Nepal in health-system research

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Background: Nepalese doctors lack research skills, which has its root in the medical education of our country. Despite having strong medical curricula, graduates are rarely competent in research methodology. This is reflected in their professional careers which are characterised by a lack of evidence-based decision making in clinical practice.
Objectives: The primary purpose of the project is to train medical officers of the Government of Nepal on health research methodology to enhance their capacity to conduct and report on local studies.
Methods: The capacity building project is a 3-phased training package for the newly recruited 25 medical officers.

At the end of their first training in December 2015, participants developed individual research proposals, 5 of which were awarded mini-research grants. The entire cohort was then divided into 5 groups for fieldwork. Participants have recently completed their data collection to be eligible for the second-round of training on data management. This will lead the participants to produce results and into the third-round training on manuscript writing.
Results: We have noticed the enthusiasm of participants during the fieldwork, and their commitment to the future engagement. Participants also indicated an interest in research careers. We also received an overwhelming request from other medical officers for further training. As a result, the Ministry of Health decided to scale-up the project in the upcoming fiscal year 2017/18 with a plan to provide research grants for medical officers for the training.
Conclusions: The project will gradually produce medical officers competent in generating evidence within the context of the local health system. The training approach will promote evidence-based healthcare practices in low and middle-income countries (LMICs).

1073
The longitudinal accumulated effects of mastery of stress of families to reduce their stress and PTSD through critical-care transition

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Background: When families suffer critical illnesses, not only the health of family members is affected, but more importantly, the family's ability to function properly is impacted. The solution to such problems is to investigate the family's response to stress as well as factors affecting their ability to master stress.
Objectives: This research aims to investigate the accumulated ability of families to master stress and PTSD during the critical-care transition period.
Methods: In order to achieve prospective and long-term traceability of the research, participants were recruited from a group of families of critically ill patients from admission to discharge from ICU after 6 months. We measured the families' anxiety and acute stress, as well as their ability to manage stress. Data were collected from a northern medical centre's neurosurgery and burn department through structured surveys and voluntary interviews with family members. A total of 42 sets of survey results were collected from the 4 different time periods (Time 1 - Time 4).
Results: From the perspective of baseline-tracking model analysis, there is a significant correlation between the mastery of stress at Time 1 and the acute-stress at Time 2 and Time 3. Similarly, there is also a significant correlation between the mastery of stress at Time 1 and HADS at Time 3 and Time 4. This indicated that when young adult patients are admitted into ICU, the immediate increase in family function and mastery of stress will significantly affect the emotions and stress response of family members 3 & 6 months later. The accumulated effect on mastery of stress at two different time slots has a negative correlation with ASD of Time 3 & HADS of Time 4. This shows that maintaining good family function and mastery of stress, can improve the emotions and stress response of critically ill patients.
Conclusions: This research shows that as mastery of stress improves, it can lower the after-effects of trauma. Results show that a families' good mastery of stress can improve the adaptation of family members.

Attachments: 2017 Crochrane .pdf

1074
Understanding complex issues of GP retention using a visual model to interface qualitative evidence synthesis, patient involvement and primary research

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Background: Many UK GPs are leaving, or intending to leave, general practice. Our research is part of a wider mixed-methods study (ReGROUP) focusing on retention of the experienced GP workforce.
Objectives: To identify factors that affect GPs' decisions to quit direct patient care, take career breaks from general practice, and return to general practice after a career break.
Methods: We undertook a systematic review of qualitative research to identify factors that affect GP retention. Five UK interview-based studies were found and quality assessed using the adapted 'Wallace tool'. A thematic synthesis was performed using NVivo software and a graphic 'explanatory model' constructed to provide an overview of the key contexts and factors. The model was presented in two discussion groups with patient representatives and primary qualitative researchers from the wider team.
Results: A detailed explanatory framework of factors which underlie GPs satisfaction/dissatisfaction in their role emerged from the evidence. Verification of the model's applicability was confirmed by both patient representatives and primary research co-investigators. Three central dynamics key to understanding UK GP quitting behaviour emerged in the graphic model – factors associated with low job satisfaction, high job satisfaction, and those linked to the doctor-patient relationship – set within the contextual influence of the changing nature of clinical practice. Patient representatives noted that factors contributing to high job satisfaction were under-represented in the model, resulting in primary researchers adjusting their sampling frame to capture the experiences of GPs intending to remain in general practice.
Conclusions:A visual explanatory model was used to facilitate discussion with both patient representatives and primary researchers to check 'real life' applicability of review findings and 'join up' different elements of the wider ReGROUP research programme. The model highlighted gaps in current understanding and primary researchers responded to ensure elicitation of views from 'remaining' GPs.

1075

Using qualitative methods to assess impact of public involvement in a UK national lung cancer screening health technology assessment (HTA)

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Background: In January 2017 we began conducting a HTA for a potential UK lung cancer screening programme. Prior to commencing, we consulted public participants in order to elicit a wide variety of perspectives to enhance the quality and relevance of our HTA research.
Objectives: To incorporate public views in the HTA process and assess impact, particularly on the systematic review and economic model.
Methods: Three workshops, targeting different groups, and a community drop-in session were conducted. Workshops consisted of an introduction to HTA, a facilitated session using a chart to elicit views on outcomes relevant to screening and a final facilitated session using visual models of published research to explore and extend personal attitudes to lung cancer screening. Following ethical approval all workshops were audio recorded and transcribed. This enabled an inductive thematic analysis of all meetings. An ethnographic approach was employed to assess impact, with self-reflective and observational field notes taken throughout the HTA process.
Results: The workshop format successfully elicited public views that were relevant to the HTA process and which broadened the perceptions of the wider HTA team. Participants shared their experiences and a variety of views were expressed in the workshops. This provided common themes as well as variability. Transcript textual data

was reduced into themes and interpreted into an analytical framework which was member checked by PPI researchers, HTA researchers and a PPI representative. Transferability was confirmed by clinical experts during a stakeholder meeting. We present results of the thematic analysis and an assessment of its impact on the lung cancer screening HTA, including the systematic review and economic model.
Conclusions: HTA researchers took an active role in design and facilitation of public involvement workshops and undertook a thematic analysis of all transcripts. This increased HTA researcher's sensitivity to public views, facilitated sharing of public views across the HTA research project team and with clinical advisor stakeholders, thus maximising impact in the HTA process.

1076

Comparative efficacy of anti-hypertensive agents in salt-sensitive hypertensive patients: A network meta-analysis

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Background: Salt-sensitive hypertension is a complex disease associated with many environmental and genetic factors. However, there are so many different medications to treat salt-sensitive hypertension that doctors are uncertain.
Objectives: To compare the effectiveness of different classes of antihypertensive drugs on the reduction of blood pressure.
Methods: The protocol of this network meta-analysis was registered in international prospective register of systematic reviews (PROSPERO) with registration number CRD42016052913. We systematically searched PubMed, EMBASE, Cochrane Library, Cochrane Central Register of Controlled Trials (CENTRAL), ClinicalTrials.gov and International Clinical Trials Registry Platform(ICTRP) from inception to November 2016. Studies that compared the efficacy of two or more anti-hypertensive drugs, or placebo with adult salt-sensitive hypertensive patients were included. The primary outcomes were the changes of mean arterial pressure as well as systolic and diastolic blood pressure.
Results: 22 studies (1686 individuals) were finally included in the network meta-analysis. However, three studies extracted data twice (different salt intake) so the total included studies were 25. The surface under the cumulative ranking curve (SUCRA) results showed that CCBs combined with Metformin in moderate salt intake was significantly the most efficacious compared to placebo [standardised mean differences (SMD), 95% credibility intervals (CI): 26.66, 12.60-40.16], ARBs [SMD, 95% (CI): 22.94, 5.26-40.51] and other interventions. After meta regression and subgroup analysis, we found that sample size, countries as well as diagnose method of salt-sensitive hypertension were lead to the 63.58% of heterogeneity.
Conclusions: This network meta analysis indicated that CCBs combined with Metformin in moderate salt intake had the superior efficacy of reduction of blood pressure in salt-sensitive hypertension. Funding: the Natural Science Foundation of China (81373076); Beijing Natural Science Foundation (7172023)

Attachments: network plot3.14.tif, NMA flow diagram 3.14.jpg, forest plot 3.14.tif

1077

The influence of funding source on study characteristics in the Australian New Zealand Clinical Trials Registry (ANZCTR)

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Background: Clinical trials are increasingly funded by industry. The influence of funding source on research conduct and outcomes remains controversial. There is evidence that industry funding influences the information published after trial completion. It is unclear whether differences in study characteristics between industry- and non-industry funded trials can be detected prior to trial commencement at the time of registration.
Objectives: To investigate whether, and how, funding source influences study characteristics, as documented at the time of registration.
Methods: We examined the distribution of primary funding sources across all studies registered on the ANZCTR in 2016. We analysed whether funding source was related to the following study characteristics: target sample size, type of controls used, prospective versus retrospective registration, and the primary purpose of the study ie prevention, diagnosis, education or treatment. University-funded studies were used as the reference group.
Results: Study characteristics differed across funding sources (Figure). Of the 1753 registered studies, 14% were industry-funded. Industry-funded studies were less likely to use active controls eg standard care (Odds Ratio (OR)=0.43, 95% Confidence Interval (CI)=0.31 - 0.60), but they were more likely to be prospectively registered (OR=1.36, 95% CI=1.11 - 1.66). There was no statistically significant difference in target sample size (Median(Interquartile Range)industry=48(72); Median(Interquartile Range)university=60(80), p=0.68). Funding source was related to the primary purpose of the study ($\chi 2(28)= 164.89$, p<.001), with 85% of industry-funded studies aiming at treatment while governments and universities were more likely to fund prevention, diagnosis and education studies.
Conclusions: For industry-funded trials, the higher proportion of prospective registration indicates an awareness of the necessity to reduce bias. Yet, their reduced use of active controls may increase effect sizes and thus produce more favourable results. Non-industry funders are crucial to ensure research addresses not only treatment, but also prevention and education questions.

Attachments: Figure1.pdf

1078

Comparing risk of bias between prospectively and retrospectively registered trials in the Australian New Zealand Clinical Trials Registry (ANZCTR)

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Background: Prospective trial registration is an important tool for reducing reporting bias. Registration prior to enrolment of the first participant helps ensure transparency by publicly documenting key characteristics and outcomes prior to data collection or analysis. It has been proposed that systematic reviews should only include prospectively registered studies but it is currently unclear whether risk of bias is generally higher for retrospectively registered studies.
Objectives: To compare study characteristics and overall risk of bias for prospectively and retrospectively registered studies.
Methods: We included all 1753 studies registered on the ANZCTR in 2016. Registrations before enrolment of the first participant were defined as prospective; registrations after were defined as retrospective. We analysed whether timing of registration was related to allocation method (randomised versus non-randomised), blinding and target sample size. We also combined these criteria to assess overall risk of bias: studies that were randomised, blinded and had an above-median sample size were classified as low risk of bias.
Results: As shown in the Figure, prospectively registered trials were more likely to be randomly allocated (OR=1.29, 95% Confidence Interval (CI)=1.01-1.64), and to blind their participants to treatment allocation (OR=1.59, 95% CI=1.27-1.98). There was no statistically significant difference in target sample size (Median (Interquartile Range) prospective=72 (157); Median (Interquartile Range) retrospective=70(129), p=.39). Of the studies classified as low risk of bias, 41% were retrospectively registered and 59% were prospectively registered, this difference was statistically significant (OR=1.53, 95%CI=1.18-1.98). Conclusion: While on average prospectively registered studies were less likely to be biased, 4 out of 10 of all studies that had an overall low risk of bias were

retrospectively registered. Excluding retrospectively registered studies from systematic reviews would result in the exclusion of large numbers of low risk-of-bias studies that would otherwise add important information. Other potential solution will be presented.

Attachments: Figure2.pdf

1079

Identifying opportunities for increased patient and public involvement in the development of the Academy's Evidence Analysis Library Nutrition Practice Guidelines

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Background: The Academy of Nutrition and Dietetics Evidence Analysis Library (EAL) was launched in 2003. Since inception, the EAL strives to improve the quality of Evidence-based Nutrition Practice Guidelines (EBNPG) through continuous review and revision of methodology. Patient and public involvement (PPI) is a known standard of quality. Previously, the EAL incorporated PPI through: volunteer workgroups, external review, and patient education materials. The EAL has the opportunity to improve the quality of EBNG by enhancing PPI. In 2012 the EAL began a patient advocate participation pilot (in progress). The EAL is working to build upon the patient advocate pilot and seek further opportunities for PPI.
Objectives: Identify opportunities and feasible methods for PPI in the development of EAL EBNPG. Develop a plan and timeline for PPI implementation, maintenance and evaluation.
Methods: Review results of a recent EAL EBNPG external review (AGREE II) to achieve a baseline and identify areas for improvement of PPI. Outline EAL EBNPG development steps to further identify feasible areas for PPI. Consult credible resources such as the G-I-N Public Toolkit and the SIGN Handbook for PPI strategies, and consider necessary modifications for incorporation in EBNPG methodology.
Results: The Gestational Diabetes EBNPG was reviewed by 14 stakeholders in December 2016, global score (91.7%), lowest scoring domain, Stakeholder Involvement (75%). The following EBNPG steps were identified for PPI development (scope, external review, dissemination and implementation), and PPI improvement (patient advocate workgroup participation). Effective strategies for PPI are as follows: scope (consultation); development (participation), dissemination and implementation (communication). Conclusion: Several areas for PPI improvement and strategies for implementation have been identified. EAL staff, alongside the member oversight committee, have begun drafting applicable resources for PPI including but not limited to: recruitment, appointment, and roles and responsibilities of patient advocate workgroup members; and recruitment of target-population reviewers.

1080

The Observational Health Data Sciences and Informatics (OHDSI) collaborative: Optimising the value of observational data

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Background: The Observational Health Data Sciences and Informatics (OHDSI, www.ohdsi.org) programme is a multi-stakeholder, interdisciplinary collaborative creating open-source solutions that enhance the value of observational health data through large-scale data sharing and analytics.
Objectives: OHDSI's mission is to optimise the value of observational health data through large-scale analytics.

Our international research community enables active engagement across multiple disciplines (e.g. clinical medicine, biostatistics, computer science, epidemiology, and life sciences), spanning multiple stakeholders (e.g. researchers, patients, providers, payers, product manufacturers and regulators).
Methods: OHDSI employs rigorous data-standardisation conventions to transform patient-level clinical and claims data to a transparent and reproducible, harmonised information model. The OMOP Common Data Model (CDM) allows for the use of shared analytic tools for data quality assessment, phenotype building, cohort building, and population- and person-level predictions. All tools are open-source and managed by an active international community.
Results: Currently, over 50 international data partners, representing over 140 multidisciplinary research collaborators in over 20 countries have transformed data from more than 660 million patients. The CDM and standardised vocabulary have been downloaded over 2300 times since 2015. There are nearly 600 community forum members with more than 3600 visits to the top 5 posts alone. About 70 studies have been published exploring OHDSI analytic methodology and the impact of observational big-data analytics. Multiple research studies are under way using standardised data from OHDSI to investigate questions including fully characterising oral antibiotics for acne vulgaris treatment and delineating clinical treatment pathways for diabetes mellitus.
Conclusions: OHDSI establishes an international collaboration to achieve high-quality, efficient and transparent observational research. This effort holds promise for improving population-level estimation, comparative effectiveness research, quality improvement and public policy.

1081

A scoping review of published literature on vector-competence characteristics for Chikungunya Virus in Aedes aegypti and Aedes albopictus mosquitoes

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Background: Aedes aegypti and Aedes albopictus are mosquito vectors for Chikungunya Virus (CHIKV), a pathogen responsible for several epidemics. Climate change could facilitate the introduction and establishment of these mosquito vectors in new regions.
Objectives: This scoping review collates information from peer-reviewed literature on competence characteristics in Aedes aegypti and Aedes albopictus for the efficient transmission of CHIKV within vector populations, as well as bi-directional transmission between vectors and hosts.
Methods:A search strategy using 7 databases was developed and implemented to capture all relevant scientific literature, followed by stringent search verification. Article screening and data extraction were conducted independently by 2 reviewers. Descriptive analysis highlighted the body of research specific to vector competence in each vector species, research gaps, and areas with significant evidence.
Results: Preliminary results of literature up to May 2015 identified 473 relevant articles on both CHIKV vectors, of which 138 (29%) articles reported on vector-competence characteristics, such as lifespan, density per human, egg diapause and hatching rate, female fecundity, extrinsic incubation period, emergence to next stage, infection, dissemination and transmission rates. Vector behavioural characteristics such as host biting and, house, container, and Breteau indices were reported in 115 (24%) of the identified articles. Landscape and ecological risk factors for mosquito exposure/abundance were described in 99 (21%) articles and 8 (1.7%) papers examined phylogeny of the two vector species. Vector-mitigation strategies and updated results to January 2017 will be presented.
Conclusions: This scoping review provides important data on vector suitability for harbouring and transmitting CHIKV, and can serve as evidence-informed knowledge for policy makers and scientists to predict and mitigate the future spread of CHIKV globally.

1082

Synthesis research in support of public health decision making on vector-borne diseases in Canada

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Background: From priority issues such as Lyme disease, to unprecedented emergency issues like Zika virus, synthesis research can support decision making, predictive modelling, risk assessments and research activities.
Objectives: Adapt knowledge synthesis methodologies, including scoping reviews and systematic reviews to develop evidence-informed summaries on priority vector-borne disease issues in support of public health decision making and prevention activities.
Methods: We have conducted several scoping reviews, systematic reviews and meta-analyses on vector-borne diseases over the last five years. We have developed methods that accommodate diverse evidence and study designs while maintaining accountability and minimising bias in our synthesis reviews. There are several challenges to summarising data on humans, hosts and vectors that stem from the inclusion of an array of literature. The unique challenges will be highlighted in the presentation.
Results: Using examples from synthesis research projects on Lyme disease (Borrelia burgdorferi), Chikungunya, Zika and Powassan viruses I will demonstrate how we use stakeholder engagement to guide our synthesis research, how we adapted the risk-of-bias tools to observational studies and the strategies that have been developed to summarise diverse information.
Conclusions: Synthesis research methodologies can be adapted and used to address almost any research question including infectious disease public health issues. There are often large quantities of literature addressing an array of questions on any given topic that needs to be identified and summarised to facilitate evidence-informed decision making in public health. The strengths of synthesis research methodologies; accountability, transparency and reproducibility, are highly valued attributes. The need to appropriately prioritise topics for synthesis research when limited resources are available, and the skills, time and man-power required have been a barrier for wide-spread adoption of synthesis research in the area of infectious disease public health.

1083
Adolescents and young adults' experiences of living with everyday pain – a qualitative metasynthesis

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Background: 15-35% of adolescents and young adults (AYA) worldwide are suffering from persistent or chronic pain conditions. The pain experience is a complex interaction between biological, sociocultural, and psychological factors. Self-reported pain increases with age, and may lead to increased use of pain relievers as over-the-counter analgesics, sleep problems, stress and school dropout.
Objectives: To identify and synthesise evidence from qualitative primary studies on how AYA's experience living with everyday pain. Everyday pain is defined as persistent, recurrent or episodic pain in any body site, not associated with cancer or similar life-threatening malignant disease.
Methods: This qualitative metasynthesis was informed by the Joanna Briggs Institute's guidelines and Sandelowski and Barroso's guidelines for synthesising qualitative research. The electronic databases Medline (OVID), CINAHL (OVID), PsycINFO (OVID), EMBASE (OVID), Google Scholar, MedNar and ProQuest were searched for studies published between 1 January 2005 and 1 February 2017. Forward and backward citations were conducted in Psycinfo (OVID) and Medline (OVID), ISI WOS, Scopus, CINAHL and Google Scholar. Inclusion criterions were studies published in English or Nordic languages describing adolescents' and young adults' (13-24 years) first-hand experiences of living with everyday pain regardless of gender, ethnicity or country of origin. Critical appraisal, data extraction and data synthesis were carried out according to existing guidelines for conducting

qualitative metasynthesis.
Results: Of the 916 records screened, 9 studies n= 184 (female n=127 and male n=57) were included. Three main themes characterised AYAs experiences of living with everyday pain: 1) My body is in pain - struggling to be acknowledged and believed; 2) Exploring sources of information to manage everyday pain; and, 3) Medication and analgesics as a source being relieved from pain.
Conclusions: Adolescents and young adults tried to manage their pain by searching for information and ways to relieve their pain, while at the same time struggling with distrust and lack of acknowledgement of their pain experiences.

1084

Treatment of acute migraine attacks in children with analgesics on the World Health Organization Essential Medicines List: A systematic review

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Background: The World Health Organization Essential Medicines List (WHO EML) contains two analgesics for treatment of acute migraine attacks in children: ibuprofen and paracetamol. Objective: The aim of this study was to systematically analyse direct evidence from randomised-controlled trials (RCTs) and systematic reviews (SRs) about benefits and harms of these analgesics.
Methods: Embase, CDSR, CENTRAL, DARE and MEDLINE were searched. Two reviewers independently screened the literature and extracted data. Meta-analysis was conducted for pain-free at 2 h, pain relief at 2 h and adverse events. Studies were further analysed using Cochrane risk-of-bias tool, AMSTAR and GRADE methodology. The study was registered in PROSPERO.
Results: Three RCTs (including 201 children) and 9 SRs on ibuprofen or/and paracetamol for acute migraine attacks in children were included. The RCTs indicate that ibuprofen and paracetamol are more effective than placebo. The studies had few data about safety. The RCTs had unclear or high risk of bias on most of the domains. Meta-analysis of the trials indicated that ibuprofen was superior to placebo for number of children who were pain-free at 2 h or had pain relief at 2 h, but without difference in adverse events. There were no differences between paracetamol and placebo, neither between ibuprofen and paracetamol in those three outcomes. Quality of analysed outcomes was very low. The 9 SRs analysed various therapies for migraine in children, and were published between 2004 and 2016. Only two SRs included all three RCTs. Conclusions of SRs regarding efficacy of ibuprofen and paracetamol were discordant. The majority of the SRs were of low quality. Conclusion: Limited data from RCTs indicate that ibuprofen is an effective analgesic for treating migraine attacks in children. Direct evidence for paracetamol is less conclusive. The available RCTs included small numbers of children and the trials were of poor quality. Inclusion of ibuprofen and paracetamol as anti-migraine medicines for children in the WHO EML is also based on indirect (i.e. studies in adults) and observational evidence (e.g. cohort studies).

1085

Shuxuetong injection for ischaemic stroke: An overview of systematic reviews

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Objectives: This overview is to summarise the systematic reviews (SRs) about Shuxuetong injection for ischaemic stroke (IS), and to evaluate the methodological quality and the current evidence from these SRs.
Methods: We searched 6 databases (including CNKI, Wan Fang, VIP, SinoMed, Cochrane Library and PubMed) until October 2016, and included the SRs of randomised-controlled trials (RCTs) concerning Shuxuetong injection for IS. The AMSTAR scale was used to evaluate the methodological quality.
Results: Ten reviews (involving 136 RCTs with more than 11 508 participants) were included in this overview, the AMSTAR scales of these reviews were 3 to 7 with an average of 5.6. Most of the reviews assessed clinical efficiency (9/10, 90.0%), neurological deficits score (8/10, 80.0%) and adverse events (7/10, 70.0%). Some reviews assessed mortality (1/10, 10.0%), cure rate (1/10, 10.0%), efficiency (1/10, 10.0%) and activities of daily living (1/10, 10.0%). The overall effect of Shuxuetong injection was better than the control group. Seven reviews (involve 54 RCTs) reported adverse events, 43 RCTs showed there were no adverse reaction and 11 RCTs showed a slight adverse reaction (including poor appetite, nausea, vomiting, subcutaneous ecchymosis, rash, low thermal or facial redness).
Conclusions: There may be marked advantages about Shuxuetong injection for IS, but more high-quality studies are needed. We can report reviews according to AMSTAR scale for a standardisation report. Evidence-based medicine experts should carry out more training courses about the methods of clinical research and SRs.

1086

Linked-evidence synthesis evaluating interventions aiming to improve the mental health of children with long-term conditions: Involvement of young people

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Background: We recently completed a project which involved two linked systematic reviews and an overarching synthesis evaluating the effectiveness and experiences of mental-health interventions for children and young people (CYP) with long-term physical conditions. We involved CYP throughout the project from planning to dissemination of the findings. Aim: To describe the process of involvement of CYP within a linked-evidence synthesis project, share the outcomes and reflect on lessons learned.
Methods: CYP with lived experience of long-term conditions (LTC) and mental-health difficulties were invited to attend a series of 4 events held at Great Ormond Street Hospital in London. Each event was structured around a series of activities to facilitate discussion. Activities were devised to aid reviewers' understanding of emerging findings and influence the developing project. CYP also provided feedback on the definition of key terms and methods of dissemination. Parents attended the final 2 events to discuss issues relevant to families. CYP and their parents helped prepare dissemination materials including plain-language summaries and a podcast. All involvement was co-ordinated by a dedicated member of the research team. Impact: Insights from CYP were crucial to the synthesis at all stages. CYP gave feedback on outcomes identified within the review of effectiveness and provided ideas which contributed towards the development of themes or categories in the review of experiences and in the overarching synthesis. Their knowledge of the project enabled them to develop accessible materials summarising the findings, which were disseminated to children, families and a range of organisations. CYP enjoyed taking part in the consultation because it gave them the chance to meet their peers, share experiences of living with an LTC and contribute towards disseminating findings relevant to their own lives.
Conclusions: Involvement of CYP throughout the project allowed us to reflect the experiences of those with the most insight, enhanced the applicability of the findings and enabled the CYP to connect with others in similar situations.

1087

Alpha-glucosidase inhibitors and cardiovascular outcomes in patients with type-2 diabetes: A systematic review and meta-analysis

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Background: The guidelines from ADA and EASD indicate that whether AGIs can reduce the risk of cardiovascular events in patients with type-2 diabetes mellitus is unclear. The effect of alpha-glucosidase inhibitors on cardiovascular events in patients with type-2 diabetes is unclear.
Objectives: To assess whether the AGIs therapy was associated with increased risk of cardiovascular events in patients with type-2 diabetes.
Methods: We searched Medline, Embase, the Cochrane Central Register of Controlled Trials (CENTRAL) from inception to May 2015. We included a study if it was a RCT, cohort study, or case-control study that compared AGIs against placebo, lifestyle modification, or active anti-diabetic medication in adult type-2 diabetes patients. We also required the eligible study having follow up for at least 12 weeks (not applicable to case-control studies), and having explicitly reported the outcome of any cardiovascular events (either reported as raw data or adjusted effect estimates with 95% confidence intervals). We classified study designs according to recommendations by the Cochrane Non-Randomised Studies Methods Group.
Results: We identified a total of 5318 potentially relevant reports. Ultimately, 18 studies proved eligible, including 16 RCTs and 2 cohort studies. Ten trials reported 129 any cardiovascular events occurred in 4465 patients who used at least one medication (raw event rate 2.9%). The pooling of those trials showed a statistically significant difference in the risk of any cardiovascular events between AGIs treatment and control (OR 0.66, 95% CI 0.44 to 0.98; I-square=26%).
Conclusions: In summary, the available evidence suggests the possibility that AGIs could reduce the risk of any cardiovascular events and MI, although their effects on CI, heart failure and cardiovascular mortality remain uncertain. The current body of evidence, however, is not definitive. More carefully designed, conducted, adequately powered trials are warranted.

1088
Human factors and ergonomics on healthcare and patient-safety practices: A systematic review

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Background: From the viewpoint of human factors and ergonomics (HFE), errors often occur because of the mismatch between the system, technique and characteristics of the human body. HFE is a scientific discipline concerned with understanding interactions between human behaviour, system design and safety.
Objectives: To evaluate the effectiveness of HFE interventions in improving healthcare workers' outcomes and patient safety, and to assess the quality of the available evidence.
Methods: We searched databases, including MEDLINE, EMBASE, BIOSIS Previews and the CBM (Chinese BioMedical Literature Database), for articles published from 1996 to March 2015. The quality assessment tool was based on the risk-of-bias criteria developed by the Cochrane Effective Practice and Organization of Care (EPOC) Group. The interventions of the included studies were categorised into 4 relevant domains, as defined by the International Ergonomics Association.
Results: For this descriptive study, we identified 8949 studies based on our initial search. Finally, 28 studies with 3227 participants were included. Among the 28 included studies, 20 studies were controlled studies, two of which were randomised-controlled trials. The other 8 studies were before/after surveys, without controls. Most of the studies were of moderate or low quality. Five broad categories of outcomes were identified in this study: 1)

medical errors or patient safety; 2) healthcare workers' quality of working life (e.g. reduced fatigue, discomfort, workload, pain and injury); 3) user performance (e.g. efficiency or accuracy); 4) healthcare workers' attitudes towards the interventions (e.g. satisfaction and preference); and, 5) economic evaluations.
Conclusions: The results showed that the interventions positively affected the outcomes of healthcare workers. Few studies considered the financial merits of these interventions. Most of the included studies were of moderate quality. This review highlights the need for scientific and standardised guidelines regarding how HFE should be implemented in healthcare.

1089

Innovative patient partnership in creating trustworthy guidelines, from protocol to publication: Case studies of BMJ Rapid Recommendations

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Background: BMJ Rapid Recommendations (RapidRecs) are trustworthy guidelines published in the BMJ and MAGICapp in response to practice-changing evidence. RapidRecs are developed by unconflicted international panels of clinical experts, methodologists and patient partners. A cornerstone of RapidRecs is innovating methods for patient partnership.
Objectives: We sought to determine the feasibility and effect of patient partnership at each step of guideline development.
Methods: For each RapidRec, we recruit patient partners from consumer organisations, panel member referrals, and Twitter. Partners receive an invitation, conflict of interest form, and personal call describing RapidRecs, expected commitment, and timelines. Upon participation, they: 1) identify and prioritise patient-important outcomes for the supporting systematic review; 2) identify practical issues for shared decision making; 3) engage in an education session before panel deliberations; 4) participate in deliberation teleconferences; and, 5) edit draft recommendations and manuscript as co-authors. We will conduct interviews with patient partners and panel members to identify strengths and weaknesses of our approach. We will review impact by reporting unique contributions made by patient partners for each RapidRec.
Results: To date, we recruited 16 partners for 5 guidelines, from general consumer organisations (N=9), disease-specific consumer organisations (N=4), and referrals (N=3). Preliminary feedback from patients and panel members has been very positive regarding process and patients' contributions. RapidRecs are focused guidelines, thus our approach may not generalise to complex guidelines or policy deliberations. Areas of improvement are maximising patient involvement without excessive burden, producing guidance on patient partnership for guideline development organisations, and documenting challenges (e.g. recruitment, education) and resources required. Project results will be presented at the Summit.
Conclusions: We provide a proof-of-concept that meaningful patient partnership is achievable, producing more trustworthy, relevant, and patient-centred guidelines for shared decision making.

1090

What is the effect of phasing out long-chain per- and polyfluoroalkyl substances on the concentrations of perfluoroalkyl acids and their precursors in the environment?

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Background: There is a concern that continued emissions of per- and polyfluoroalkyl substances (PFASs) may cause environmental and human health effects. PFASs are a broad class of man-made substances that have been produced and used in commercial products and industrial processes for more than 60 years, and are now widespread in human populations. Phasing out the manufacture of some types of PFASs started in the year 2000.
Objectives: To investigate whether concentrations of PFASs in humans and in the environment are changing significantly, and whether such changes can be related to implemented phase-outs or regulatory actions. Another aim is to understand why conflicting temporal trends may be reported.
Methods: A systematic review was conducted according to the guidelines by Collaboration for Environmental Evidence (CEE). Searches for primary research studies were performed in bibliographic databases, on the internet, through stakeholder contacts and in review bibliographies. As meta-analysis was not feasible, this review is focused on a narrative synthesis.
Results: Human concentrations of PFOS, PFDS, and PFOA are generally declining, while previously increasing concentrations of PFHxS have begun to level off. Rapid declines for PFOS-precursors have also been consistently observed. In contrast, limited data indicate that human concentrations of PFOS and PFOA are increasing in China. Human concentrations of longer-chained PFCAs (C9-C14) are generally increasing or show insignificant trends.
Conclusions: Declining trends in humans contrast with findings in wildlife and in abiotic environmental samples, suggesting that declining PFOS, PFOS-precursor and PFOA concentrations in humans likely resulted from removal of certain PFASs from commercial products or from food packaging. Increasing concentrations of long-chain PFCAs are likely due to increased use of alternative PFASs. For humans, more temporal trend studies are needed in regions where manufacturing is most intense, as the one human study available in China is much different than in North America or Europe. Temporal trends of PFASs in the southern hemisphere are largely uninvestigated.

1091

Regulatory and road-engineering interventions for preventing road traffic injuries and fatalities among vulnerable road users in low- and middle-income countries

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Background: According to the World Health Organization (WHO), road traffic crashes kill at least 1.24 million people and injure 50 million each year. Low- and middle-income countries (LMIC) have the highest proportions of road deaths among vulnerable-road-users. This review has documented the scientific evidence about effectiveness of road safety interventions in LMIC.
Objectives: To establish what is known about the effects of road-engineering and traffic laws and regulatory interventions for prevention of fatalities and injuries among vulnerable road users LMIC.
Methods: This review included non-randomised studies. The definition of 'vulnerable road users' included pedestrians, cyclists, and motorcyclists of all age groups in LMIC. Studies were grouped by road engineering and traffic law enforcement and regulatory intervention. The data within this grouping were presented by mortality and morbidity outcomes.
Results: Effect sizes were computed for 18 studies. Five studies assessed the effect of road engineering interventions. In three uncontrolled before-and-after studies, fatalities declined by 48%, however, accidents increased over two times after interventions. In two time-series studies, mean casualties relative to post-intervention declined by 44% in percent change.Thirteen studies assessed the effect of enforcement of traffic laws

and regulatory interventions. In ten uncontrolled before-and-after studies, fatalities declined by 6% and injuries by 26% after interventions. In places where a mandatory helmet law was enforced, non-compliance among motorcycle riders reduced by 86%. Red-light and speed-violations were reduced by 61% due to the impact of automated-enforcement-system. In three time-series, the number of road traffic casualties relative to post intervention declined by 38%.
Conclusions: The effect of traffic laws and regulatory interventions showed favourable outcomes after interventions.The effect of road engineering interventions showed mixed results: accident increased, however, fatalities reduced. Meta-analysis results presented heterogeneity, which downsized the study quality of studies from moderate to very low quality.

1092
National guidelines for the specialised care of gender dysphoria in Sweden

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Background: Gender dysphoria (GD) is a condition marked by significant distress and/or impairment in life functioning due to an incongruence between a person's gender identity and the sex assigned at birth. Associated with GD are levels of psychopathology and psychiatric morbidity that are higher than norma-tive data or controls, but improve following gender-affirming treatment (GAT). GAT may comprise counselling and support, hormonal treatment, voice and speech therapy, surgical interventions and skin therapy. The terms and time for initiating treatment of GD in adolescence is different than those in adulthood. Aim of guidelines: In 2012, the Swedish National Board of Health and Welfare was commissioned by the Swedish government to issue 2 sets of national guidelines targeting all aspects of GAT, 1 for adults and 1 for children/adolescents. The aim was to counteract important regional variations in care that were known to exist, to promote the use of individually tailored treatment measures based on the best-available knowledge and to ensure an up-to-date quality of treatment. The guidelines were published in 2015.
Methods: International guidelines, views of patient representatives and local priorities as expressed by professionals provided the background against which the guidelines were formed. Two separate expert groups (per set of guidelines) were involved in assessing the evidence and producing the recommenda-tions: a scientific evidence expert group and a validation group for the proposed recommendations. Patient representatives helped in focusing the scope of the guidelines and in identifying problem areas. Scientific evidence was predominantly scarce. A multitude of recommendations was proposed and adopted in a consensus process, based on available evidence and clinical expertise and opinion. Contents: Approximately 40 recommendations, for adults and children/adolescents respectively, cover issues such as use of multidisciplinary teams and assessment, provision of counselling, and terms for hormonal and surgical treatments.

1093
Formal consensus methods in evidence-based clinical care protocols development: A systematic review

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Background: The developing of clinical care protocols is essential in the health quality improvement in hospitals. During the clinical care protocol construction, there's a lack of evidence or evidence that must be contextualised according to the hospital circumstances and the formal consensus seems to be a systematic method to guarantee this goal, considering the clinical expertise and the best-available medical evidence; however, is unknown which formal consensus methods are used in clinical care protocol development.
Objectives: To describe formal consensus methods used in developing clinical care protocols.

Methods: A systematic search of indexed literature was carried out among electronic databases (MEDLINE, EMBASE, Cochrane Library and CRD Database), and web pages of groups that develop clinical care protocols, care protocols, and clinical practice guidelines. The review included clinical care protocols methodology reports available in English, Spanish or French that described the formal consensus method used in the clinical care protocol making. A formal consensus method was defined as an iterative process with controlled feedback that comprehends a systematic process to get and measure the level of agreement, and includes strategies to avoid potential biases associated to social interaction or subordination between the participants.
Results: Five documents were included. The clinical care protocols developed were made in national context or were made by medical associations. The formal consensus techniques used were Delphi, RAND/UCLA and Nominal Group. It was no possible to compare the developing time-lapse, the number and profiles of panel participants or the consensus developer´s activities and professional profiles in the included methods.
Conclusions: Formal consensus methodologies are useful in developing clinical care protocols. Groups that develop clinical care protocols should evaluate the advantages and disadvantages of Delphi, RAND/UCLA and Nominal Group methods to decide the most suitable method in the specific scenario where the clinical care protocol will be carried.

1094

Prevalence of personal conflict of interest disclosure in cancer systematic reviews published in high-impact journals or the Cochrane library: A systematic review

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Background: It is still unclear whether industrial funding of clinical trials might have an impact on results and conclusions. However, little information exists on the reporting of authors' conflicts of interests (COIs) for systematic reviews (SRs) and meta-analyses. Member journals of the International Committee of Medical Journal Editors (ICMJE) have an obligatory form for authors to declare potential COIs.
Objectives: To examine the presence of authors' COIs in SRs related to cancer which have been published in high-impact medical journals or the Cochrane library.
Methods: Based on an a priori protocol we performed a search in MEDLINE for cancer-related SRs published in 10 medical journals with the highest impact factors (e.g. NEJM, Lancet, etc.) between 2012/01 and 2016/12. In addition, we identified all cancer-related Cochrane reviews from the same period using the Cancer filter in the Cochrane Database of Systematic Reviews. Two review authors extracted information on COIs and content of the SR, in duplicate and independently.
Results: We identified 178 high-impact SRs and 356 Cochrane reviews, which met our inclusion criteria. A median of 8 authors (IQR 6-14) were involved in high-impact SRs and a median of 5 (IQR 4-6) in Cochrane reviews. Fifty-five (31%) SRs in high-impact journals have been published by at least 1 potentially conflicted author, 18 SRs (10%) in these journals did not give any information regarding personal COIs. Only 31 (9%) of the Cochrane reviews involved at least 1 potentially conflicted author. The median number of conflicted authors was 3 (IQR 2-7) in high-impact journals and 1 (IQR 1-2) in Cochrane reviews. Considering the first authors, 17 (10%) of the high-impact journals and 7 (2%) of Cochrane reviews reported potentially COIs conflicted. Conclusion: Potential COIs are present in a large number of SRs related to cancer. Although the ICMJE requires reporting of COIs, not all high-impact medical journals report potential COIs of involved authors. There is an important need for further research on the effects of COIs, particularly on the influence on review results and conclusions.

1095

Facilitators and barriers to modern contraception use among reproductive-aged (15-49) women living in sub-Saharan Africa: A qualitative systematic review protocol

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Background: Most women, predominantly in the developing world are unable to practice contraception. In much of sub-Saharan Africa (SSA), 55 million reproductive aged women (15-49) have an unmet need for modern contraceptive methods.Globally, enabling women to meet their pregnancy preferences has become a priority on the development agenda. Access to and utilisation of modern contraception by women especially those who want to delay or stop childbearing has been the focus of most international family planning programmes. Understanding the facilitators and barriers of modern contraceptive use among women remains critical to formulating effective policies and programmes for combating high unmet need in the sub region. To successfully meet women's modern contraceptive needs, governments and stakeholders must address a number of factors.
Objectives: The main objective of this qualitative review is to synthesise the best-available evidence on facilitators and barriers to modern contraception use among reproductive-aged (15-49 years) women living in SSA.
Methods: A systematic review of published literature will be performed by searching Medline, PubMed, CINAHL, POPLINE, Web of Science, ProQuest Social Services Abstracts and SCOPUS.The search for unpublished studies will include: World Bank website, World Health Organization website, UNICEF website, World Bank website, ProQuest Sociological Abstracts and Dissertations and MedNar to retrieve qualitative studies that include both married and unmarried reproductive-aged women (15-49 years) reporting on the experiences related to facilitators and barriers to modern contraception use among reproductive-aged women. Data will be extracted from papers included in the review using the standardised data-extraction tool from JBI-QARI. Findings will, where possible, be pooled using JBI-QARI.
Results: Anticipated findings will include synthesised evidence on the diverse facilitators and barriers to modern contraceptive use in SSA.
Conclusions: Recommendations will be made to diverse stakeholders based on the findings for further reviews, primary research, and programme implementation to improve modern contraceptive uptake in SSA.

1096
Outcome measures for keloids assessment in clinical trials

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Background: Multiple scoring systems to assess scars have been developed and are been used to measure the efficacy of the treatments for scar. There is no synthesis about those used in keloids. Objective: To summarise and critically appraise the evidence of the reported outcomes in clinical trials for the treatment of keloid scars.
Methods: Data sources: electronic databases including Medline (PubMed), Embase (Ovid) and CINAHL (Ebsco) were searched using the following terms: cicatrix, keloid and acne keloid. Study selection: two authors independently screened all records for elegibility. For inclusion, the study design and population had to be clinical trials for the treatment of adults with the diagnosis of keloid scars. The initial search retrieved 1446 records, of which 33 met the inclusion criteria. Data extraction: outcomes and intervals for measurements were extracted.
Results: Seventeen of the 33 clinical trials used the Vancouver Scar Scale to measure vascularity, pigmentation, pliability and height of the keloids. Only two clinical trials used the Patient and Observer Scar Assessment Scale (POSAS) to measure the efficacy of the treatment. Six out of 33 clinical trials used the flattening of the keloid as their main outcome. The remaining studies used modified visual analog scales, clinical photographs and other devices to measure the characteristics of the keloids at baseline and at the end of the trial. Most of the trials, 69.7% (n=23) measured the scars at weeks 0, 8 and 12. Only 18.2% of the clinical trials assessed the main outcome

at 6 month and only two for at least one year.
Conclusions: Vancouver Scale Scale is the most common outcome measure in the clinical trials for the treatment of keloids. However, flattening or height is the main characteristics that should be measure in these trials. Patient-reported instruments have to be included as an outcome in these trials.

1097
Understanding the mechanisms of trial discontinuation due to poor recruitment: Interviews with stakeholders in clinical trials

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Background: A quarter of randomised clinical trials (RCTs) are prematurely discontinued; mainly due to slow recruitment of patients. Up to 60% of such discontinued RCTs remain unpublished. Objective: To qualitatively explore underlying mechanisms and root causes of trial discontinuation due to slow recruitment.
Methods: We conducted semi-structured interviews with 49 clinical trial stakeholders such as trialists (n=22), patient representatives (n=3), presidents of research ethics committees (n=4), heads of clinical trial units (n=6), representatives of national funding agencies (n=2), the pharmaceutical industry (n=10), and regulatory agencies (n=2) between August 2015 and November 2016. All interviews were conducted in English, transcribed, and qualitatively analysed using MAXQDA.
Results: Emerging themes regarding slow recruitment and trial discontinuation were: Limited availability of funding for clinical research in the academic setting; challenges for investigators in developing collaborations with multiple recruiting hospitals in a decentralised healthcare system; the way in which 'success in research' is measured for clinicians; and, scepticism from patients towards clinical trials. Our results revealed that over optimistic numbers of eligible and consenting patients due to a lack of empirical evidence from pilot studies are common and lead to prolonged patient recruitment and exhausted budgets, particularly in the academic setting, that eventually trigger trial discontinuation. Industry-sponsored RCTs typically overcome recruitment problems by exchanging insufficiently recruiting centres with new centres. Other frequently mentioned root causes for slow recruitment were inexperienced principal investigators, busy clinicians, and lack of a professional research infrastructure.
Conclusions: More careful planning and diligent monitoring of recruitment; established recruitment networks; access to professional infrastructure; and, adequate funding were identified as key factors to prevent recruitment failure. International collaborative efforts of the clinical research community are needed.

1098
Community and home-based exercise for the prevention and treatment of hypertension

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Background: Hypertension, an important risk factor for non-communicable diseases and highly prevalent in South Africa and other African countries, exerts a substantial burden of disease. Prevalence estimates in African countries range from 40% to 60%, and this high prevalence in resource-limited communities raises sustainability questions regarding long-term treatment using expensive medications. Lifestyle modifications such as dietary changes, increased physical activity and exercise can be employed to reduce hypertension.
Objectives: To conduct a Cochrane systematic review to assess the benefits and harms of home and community-

based exercise interventions for the prevention and treatment of hypertension as applicable to low-resource settings.
Methods: Randomised trials examining the effects of exercise or physical activity for treatment or prevention of hypertension will be included. Home and community-based interventions will be included, whereas supervised interventions and those in resource-intensive settings (e.g. universities and laboratories), will be excluded. Primary outcomes will be changes in blood pressure and mean arterial pressure. Adverse events and use of anti-hypertensive medication will be secondary outcome measures. Several key stages of the review, including checking all titles and abstracts identified from electronic databases and other searches, assessing eligibility of retrieved studies for review according to the inclusion criteria, grading quality, identifying risk of bias, and extracting data from included studies, will be undertaken by two reviewers independently. Disagreements will be resolved by consensus with reference to the a priori protocol. Adverse events will be measured as the number of patients experiencing any adverse event and serious adverse events, as well as patients who withdrew or dropped out because of adverse events. Where possible, analyses will be conducted on intention-to-treat data. Missing data will be sought from study authors, or imputed if actual data cannot be retrieved. Results will be grouped by intervention, and recommendations made for application in low-resource settings.

1099
Spreading a culture of patient involvement at an institution level: HAS feedback

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Background: French National Authority for Health (HAS) strategic framework planned to develop a more patient-centred approach. In 2016, a survey of HAS scientific project managers (n = 147) showed that they need to clarify what they can expect from patients or users in a specific situation (scope, development, appraisal), in order to specify more precisely their demands.
Objectives: To support project managers for more patient involvement in HTA or guideline development and healthcare organisations accreditation procedures.
Methods: A 1-year internal project was set up to share knowledge and experiences on patient involvement at the HAS level. A working group (n = 18) was composed with one of the project managers from each scientific department, documentation service and mission for relationships with patient associations. From 2016 survey results, 3 goals were determined by the group: to study the opportunity of an intranet platform on patient involvement, to write a lexicon common to all activities at HAS, to identify and shortly describe the benefits and drawbacks of all methods available to engage patients in HAS productions. 2-3 people subgroups took charge of a specific task and a 2-hour meeting every 2 months was planned to share intersession work progress and appraise the documents.
Results: - An intranet platform for exchange and pooling resources, skills and tools on patient involvement is set up. - 10 short information cards present patient involvement methods, from information gathering to full participation such as written contribution, users test, focus groups, involvement in working group or appraisal committees, citizens' jury... Each one specifies objectives, target audience, benefits and drawbacks, description of the method, special attention points and success factors, examples driven from previous productions at HAS with resource colleague’s name to get more detailed information if necessary and links towards bibliography resources. - Lexicon is in progress and helps to clarify our view of patient/user partnership.
Conclusions: This transversal working group is a powerful way to spread a culture of patient involvement.

1101
The impact of mental health and psychosocial support programmes on people affected by humanitarian crises: A systematic review and meta-analysis

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Background: The incidence of events leading to humanitarian emergencies has increased four-fold in the past 25 years (Guha-Sapir D et al. 2015). Humanitarian emergencies can have a direct impact on the psychological well-being and mental health of people affected by humanitarian emergencies. There is a growing need to identify and develop culturally relevant effective Mental Health and Psychosocial Support (MHPSS) programmes deemed to be appropriate in humanitarian crises.
Objectives: To conduct a systematic review to investigate the (un)intend effects of MHPSS programmes on people affected humanitarian emergencies in low- and middle-income countries.
Methods: A comprehensive search of electronic databases and hand searching of grey literature was completed in 2016. We extracted data, assessed risk of bias, and performed a meta-analysis of randomised-controlled trials (RCTs) on the impact of MHPSS programmes on children and young people (CYP) and adults.
Results: We included 46 RCTs (Children n=26; Adults n =20) in the meta-analysis. The findings suggest that MHPSS programmes may be effective in reducing the symptoms of post-traumatic stress disorder (PTSD) for CYP (SMD = -0.46; 95% CI: -0.69 to -0.24) and for adults (SMD = -0.75; 95% CI: -0.997 to -0.5), depression for adults (SMD =-1.18; 95% CI = -1.65 to -0.71). Narrative Exposure Therapy is effective in reducing depression and anxiety symptoms for adults but have no impact on PTSD symptoms on CYP. Psychosocial interventions may lead to an increased level of depression symptoms and decrease pro-social behaviours in CYP. There is evidence to suggest that programme intensity and the follow-up period are associated with the effect of MHPSS programmes on PTSD and depression for CYP.
Conclusions: MHPSS programmes should consider adjusting to the local context and to ensure that they address and meet the needs of populations. Additional consideration should be given the possibility of harm, as there are indications of unintended effects in delivering programmes to children and young people.

1102
A cluster randomised-controlled trial for alcohol-use disorders in HIV care clinics

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Background: Interventions for alcohol-use disorders (AUDs) in HIV-infected individuals have been primarily targeted for HIV risk reduction and improved antiretroviral treatment adherence. However, reduction in alcohol use is an important goal. Alcohol use affects other key factors that may influence treatment course and outcome. In this study the authors aim to administer an adapted intervention for AUDs to reduce alcohol use in people living with HIV/AIDS (PLWHA).
Methods: A motivational interviewing and cognitive behavioural therapy based intervention for AUDs, developed through adaptation and piloted in Zimbabwe, will be administered to PLWHA with AUDs recruited at 8 HIV clinics in a cluster randomised-controlled trial. This intervention will be compared with an equal attention control in the form of the WHO mhGAP guide, adapted for the Zimbabwean context. The primary outcome measure will be the Alcohol Use Disorder Identification Test (AUDIT) score. The World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0), World Health Organization Quality of Life (WHOQoL) HIV, viral load, and CD4 counts will be secondary outcome measures. Data will be analysed using STATA Version 14. Primary and secondary outcomes will be measured at 4 time points that is; at baseline, 3, 6 and 12 months respectively. All participants will be included in the analysis of primary and secondary outcome measures. The mean AUDIT scores will be compared between groups using student t-tests. Multilevel logistic-regression analysis will be performed for binominal variables and multilevel linear regression for continuous variables. Descriptive statistics will be computed for baseline and follow-up assessments.
Conclusions: The study will be the first to address problematic alcohol use in PLWHA in Zimbabwe. The study results will determine the effectiveness of adapting psychological interventions for AUDs in HIV-infected adults using a task-sharing framework for people living with HIV/AIDS in Zimbabwe.

1103
Humor therapy in clinical care: Forming PICO

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Background: Patients encountered in clinical tasks show their most embarrassing sides without reservation when they are in the most vulnerable state. In addition to professional care, are there humorous ways for interaction with patients to make them pleasant and effectively improve their illness?
Objectives: To understand the practicability of humor therapy in clinical care, it is necessary to hypothesise a problem answerable in clinical care for further evidence-based literature searching and appraisal.
Methods:1) Clarify the clinical situation; 2) obtain clear background knowledge; 3) focus on problems (answerable problems, including PICO); and, 4) identify problems with specific purposes and structures.
Results: Based on empirical steps, two answerable problems were formed: 1) Treatment: Can humor therapy effectively lower inpatients' anxiety? and, 2) Cost: Can humor therapy shorten inpatients' hospitalisation? Table 1 shows the foreground questions and keywords from the critical appraisal.
Conclusions: The background data revealed that the FUN effect triggered by humor benefitted blood circulation, stimulated the sympathetic nerve, released catecholamines (a neurotransmitter), and enhanced immunity. However, differences in cultural background, timing, method and subject should be considered. Despite its worth in clinical applications and suitability to diverse subjects, humor therapy has mainly focused on psychological anxiety, stress relief, feelings about symptoms, and enhancement of immunity. With the results divided into two, it is hoped that systematic evaluation is adopted to examine the effects of humor therapy on illness treatment in the future to facilitate authentic clinical applications.

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1104
Trials of tuberculosis-prevention interventions in Africa: A descriptive cross-sectional study

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Background: Prevention of new infections of Mycobacterium tuberculosis (TB) and their progression to disease is important for reducing the TB disease burden and related mortality. Randomised controlled trials (RCTs) are considered the gold standard for evaluating the effectiveness of healthcare interventions.
Objectives: Our study aimed to identify and describe published RCTs conducted in Africa for TB prevention, and assess their methodological quality. This work maps available published TB-prevention trials and identifies gaps to inform relevant key stakeholders in the TB field.
Methods: We searched 3 electronic databases: PubMed, EMBASE, and Cochrane Library in April 2015. All published RCTs investigating TB prevention in Africa were included. Two investigators independently screened records for inclusion and extracted data using a pre-defined data-extraction form. Data extracted included country, setting, interventions, funders, principal investigator, ethics and methodological quality which was assessed using Cochrane's Risk-of-Bias tool. Descriptive analysis was conducted in MS Excel.
Results: A total of 7077 records were identified and 46 trials met the eligibility criteria, Figure 1. Trials were published between 1952 and 2015, and included a median sample size of 210 participants (range 18 to 121 020).

Twenty-eight trials investigated vaccines, 15 investigated TB-preventive chemotherapy, two evaluated active case-finding, and one was a combination of BCG and TB-preventive chemotherapy interventions. Most trials were conducted in South Africa (n = 28), Figure 2. International agencies and governments were the predominant funders. Methodological quality of trials was poorly reported.
Conclusions: Studies mapping research in particular sectors can guide research and funding gaps, and highlight methodological strengths and limitations of the research conducted. In addition to the focus on vaccines and TB-preventive chemotherapy in African TB-prevention trials, researchers, governments and funders should consider increasing research on multi-faceted strategies to address transmission and active linkage to prevention services.

Attachments: Fig 1.pdf, Fig 2.pdf

1105
Effect of palm oil on obesity

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Background: One of the factors implicated in the development of obesity is dietary practices. Some controversial studies have reported a potential link between palm oil consumption and obesity due to its high palmitic acid content.
Objectives: To determine the association between palm oil intake and obesity.
Methods: A systematic review, according to the Cochrane systematic review methods, was carried out to identify any relevant evidence on palm oil consumption and obesity.
Results: A total of 292 participants were evaluated. From all the included studies, there was insufficient evidence to support the association between palm oil intake and obesity.
Conclusions: There is a lack of direct evidence that evaluated the association of dietary palm oil intake and obesity, hence limiting the conclusions that we can reach. Based on the currently available evidence, there is insufficient evidence to suggest that dietary palm oil intake is a cause of obesity.

Attachments: Abstract_Effect Of Palm Oil On Obesity_Cape Town_edited.pdf

1106
Practice of rapid evidence synthesis among systematic review authors in the Ministry of Health, Malaysia

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Background: Rapid-evidence synthesis is gaining popularity due to the demand of stakeholders and users for top-priority questions on healthcare. Rapid-evidence synthesis using the Cochrane methods, which represents the most rigorous methods in systematic review, is a challenge. In response to on-going publicity on the negative health effects of palm oil, the Malaysian Ministry of Heath commissioned the National Institute of Health (NIH) to

conduct a series of rapid evidence synthesis to evaluate the benefits and harms of palm oil and related products in 7 major health-related areas. Objective: This poster describes our efforts in performing a series of rapid evidence-synthesis projects using the Cochrane systematic reviews methods in a cross-institutional collaboration under the NIH, among systematic review authors in Ministry of Health, Malaysia.
Methods: A group of researchers came together to prepare a report on palm oil in the Ministry of Health Malaysia. Leveraging on the expertise in primary research and systematic review, a programme was developed to provide trainings in systematic review using Cochrane method to answer the question by policy makers on the effect of palm oil on health. These trainings were aim to improve the quality and efficiency of conducting systematic reviews. The researchers were divided into 6 groups according to area of interest on effect of palm oil namely obesity, cardiovascular and stroke, hypercholesterolemia, arthrosclerosis, cancer and diabetes. A Cochrane trainer was assigned to conduct training for all groups. Weekly meetings, with rigorous hands-on training were conducted among the researchers from August to December 2016. Result: A total of 20 weeks were taken to complete the evidence synthesis. Conclusion: These trainings and the practice of rigorous preparation of systematic review using Cochrane method is a very useful tool in synthesising reliable evidence for support of decision policy making. The exercise also provided a platform for capacity building and transfer of knowledge and increase awareness for the usefulness of evidence-based practices.

Attachments: Abstract for Cochrane Evidence Summit.pdf

1107
Clinical guidelines as a source of evidence-based information about the appropriate use of OTC drugs

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Background: The choice of OTC medicines for symptomatic treatment and prevention of some deseases requires from pharmacists to consult with patients on the principles of evidence-based medicine. It is important to ensure appropriate use of OTC medicines in the interest of the patient. Since 2010 the system of regulation of the use of OTC drugs through the approval and intermittent update of pharmaceutist protocols was created and implemented in Ukraine.
Objectives: To identify clinical guidelines and clinical protocols that can be used for development and updating of pharmaceutical care standard operating procedures (SOPs) in some negligible disorders and symptoms that patients recognise by themselves.
Methods: Information sources were searched including GIN, DynaMed to identify clinical guidelines that can be used to develop SOPs pharmaceutical assistance in responsible self-medication. The clinical guidelines found were evaluated and used for SOP development on the topics 'Dyspepsia', 'Heartburn', 'Prevention of influenza and SARS', 'Cough', 'Prevention of osteoporosis and osteoarthritis', 'Smoking cessation' and others by consensus. Finally there was public discussion of draft documents before approval.
Results: 34 pharmaceutist protocols were developed for syndromes and symptoms for which patients often consult the pharmacy for self-medication, as well as for the prevention of certain diseases. They were approved by the Ministry of Health of Ukraine (last edition 2013). Currently, documents are being updated.
Conclusions: Pharmaceutist protocols are an effective information support tool for specialist pharmacy on the principles of evidence-based medicine for the appropriate use of medicines in the patients` interest corresponding to the concept of WHO and FIP on good pharmacy practice (GPP).

1108
Measuring behaviour change for preventing HIV transmission in schools using cricket games through a randomised-controlled trial in Cameroon

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Background: Cameroon is one of the countries with the highest HIV/AIDS rates in sub-Saharan Africa, with a prevalence of 4.3% and reaching 8.8% in certain regions. HIV-awareness rates have improved in recent years.
Objectives: To measure changes in knowledge, intention and behaviour for HIV prevention in school kids in Cameroon using a cricket intervention.
Methods: We conducted a cluster randomised controlled trial of 13 schools in the city of Bamenda in Cameroon for change in knowledge and intention on sexually related HIV prevention. The 3-arm study consisted of Group 1 where a cricket ambassador was attached to a school to further strengthen skills in cricket and HIV/AIDS prevention messages in addition to the school's sports teacher; Group 2 with the school sports teacher coaching only; and, Group 3 a control group with the standard national approach to HIV prevention. Data were collected at baseline, 1 month, 3 months and 6 months' post intervention.
Results: A total of 909 students participated in the study. Analysis suggests cricket games increased knowledge by 36.1% when cricket games with ambassadors was used; by 38.2% when teachers only were used; and, by 2.9% when the standard national approach was used. There was no difference in intention. The ambassador schools' arm reached the most students (444 students) as compared to the cricket only and control arms (250 and 209 students respectively). Conclusion: Based on behaviour-change technics (BCT) taxonomy by Abraham and Michie, this intervention utilised 3 BCTs – prompt intention formation, teach to use prompts and cues, and prompt practice. However, measuring behaviour change around issues of sexuality poses atypical challenges because young people are timid about disclosing sexual behaviours. In our context, while the boys may claim sexual activity when, in fact, there has been no sexual activity, the girls may claim sexual inactivity when, in fact, there has been sexual activity. It is therefore important to conduct more unobtrusive observational studies and develop creative approaches in measuring behaviour change in sexuality.

1109
Effectiveness of cognitive behavioural therapy for individuals with mental illness: An umbrella review

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Background: Many research studies have shown the effectiveness of cognitive behavioural therapy (CBT) for patients across diagnoses of mental disorders. In order to be considered clinically useful, there needs to be extensive validation and replication.
Objectives: The aim of this umbrella review was to assess whether cognitive behavioural therapy is more effective than the usual treatments or whether it can be considered only as an alternative active treatment for those who have mental illness.
Methods: This review considers systematic reviews that include the studies of adult persons with schizophrenia, depression, anxiety disorder, insomnia, and psychosis who have received cognitive behavioural therapy (CBT). Reviews that included people with co-existing developmental disorders and/or learning disabilities will be excluded. A comprehensive search strategy was developed to find both published and unpublished reviews in English from 2003-2016. The databases were searched included the Cochrane Library, JBI Database of Systematic Reviews and Implementation Reports, Database of abstracts of reviews of effects, Pubmed, PsycINFO, ProQuest Dissertations, Theses database, ScienceDirect, and PsycEXTRA. Reviews selected for retrieval were assessed by two independent reviewers using the standardised JBI critical-appraisal instrument (JBI-SUMARI). The JBI Data Extraction Form for Review was used to extract data.
Results: This is the on-going project, however, at this stage we have found 60 SRs that met the inclusion criteria

and will be assessed for the quality, extracted and synthesised. Findings will be presented through the use of a summary table. The JBI grade recommendation will be used for an overall assessment of the quality of evidence from the reviews. A 'Summary of Evidence' table will be presented at the conclusion of the results.

Attachments: Dr.Patraporn-GES.pdf

1110

Evidence synthesis with intern doctors in Cameroon: The case of Cochrane Africa Network - Francophone hub

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Background: In partnership with Cochrane African Network, the Centre for the development of best practices in health conducts Cochrane review priorities and provides mentoring and support for resident doctors on Systematic reviews. In fact, very few resident Doctors in Cameroon know about systematic review. Challenges faced by clinicians in Cameroon through systematic reviews Primer courses were first of all the lack of knowledge on the review. There is a problem of access to evidence and a lack of skills in evidence synthesis in general. In addition, the search of evidence is difficult for francophone countries (Senegal, Burkina-Faso, Ivory Coast, Congo, CAR, Gabon…) because most of the reviews are in English language.
Objectives: To increase the utilisation of systematic reviews in French-speaking African Countries.
Methods: Participants to systematic reviews primer courses are resident doctors having a clinical practice question. The first step in introducing them to SR is the formulation of PICO based on their clinical practice questions. During the exercise of PICO formulation, many research questions appear to be primary research topics. In order to support resident doctors, a 3-stage primer courses are organise. Each stage is a 1-day workshop: Introduction to SR (step 1), How to use Evidence Assessment (step 2), and classification of clinical questions to develop SR (step 3)
Results: We organised 2 workshops and trained 25 intern doctors, 14 nursing students and 2 specialist doctors. A total of 41 review questions were proposed. Among those review questions, 14 relevant titles which were not answered in full or partially by existing reviews were selected. Within the 14 titles identified, there were 7 PICO questions for effectiveness reviews, 2 PICO questions for Etiology reviews, 1 PICO question for Economic Evaluation Review, 1 PICO question for prevalence Review and 1 PICO question for Diagnostic Tests Accuracy.
Conclusions: The clinical practice questions in Cameroon as in other sub-Saharan countries may be typical to their setting. There is a need to keep working with clinicians to identify knowledge gaps.

Attachments: Global Evidence Summit- Abstract-March_2017_Eliane_POLA.pdf

1111

'A complete shift in ownership': valuing contributions from consumers and other stakeholders in systematic reviews

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Background: Active involvement of key stakeholders, including people with a lived experience of a healthcare condition, in conducting systematic reviews is now routinely recommended, to ensure that reviews are both accessible and clinically relevant. However, there is little guidance available about how best to actively involve stakeholders within systematic reviews, or the impact of this involvement.
Objectives: To explore the different ways in which stakeholders (e.g. people with lived experience, health professionals, policy makers) have contributed to systematic reviews and the perceived impact of this collaboration.
Methods: Qualitative interview study. Participants were authors, editors or stakeholders who had direct experience of active involvement in systematic reviews. Potential participants were contacted by email and invited to take part in a Skype or telephone interview. Interviews were audio-recorded and transcribed verbatim. Thematic analysis was used to generate codes and themes, using NVivo software.
Results: Twelve people (9 review authors, 2 people with lived health experience of a healthcare condition, and 1 Managing Editor of a Cochrane Review Group) were interviewed. The level and degree of involvement described varied widely, but there were examples of stakeholder input contributing to every stage of a systematic review. Three key themes, and several sub-themes, emerged. Key themes were: 1) practical (organisational) aspects to involving stakeholders; 2) stakeholder impact on the evidence synthesis; and, 3) personal impact on the researchers themselves. Central to the success of positive stakeholder engagement was the degree of mutual respect, underpinned by the sense that all contributions were of equal merit and valued.
Conclusions: There was a general consensus that stakeholder involvement enhanced the meaningfulness of a review and directly impact on their accessibility and usefulness. A shift from the traditional researcher-led 'ownership' model of conducting systematic reviews to a new model of collaboration and partnership is considered essential for successful involvement.

1112

Measurement instruments in digital education research: A systematic review of validity evidence and psychometric properties

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Background: eLearning or digital education employs the use of information and communication technologies (ICT); and is an umbrella term which includes a multitude of interventions aimed at increasing learners' knowledge, skills, attitudes or competencies; and promoting continuous, lifelong learning. Randomised-controlled trials (RCTs) of eLearning ought to have measurement instruments with adequate validity and reliability evidence because this enables measuring what is intended to be quantified and, in turn, drawing meaningful conclusions. In other words, RCTs using invalid interpretation and use of measurement instruments are a major source of bias in eLearning research; resulting in non-comparable study results, and non-evidence-based practice.
Objectives: To conduct a systematic review of the validity evidence and psychometric properties of measurement instruments currently used in RCTs of digital education of healthcare professionals. To reduce the existing uncertainties and guide researchers, academics and curriculum developers by formulating guidelines for validation of measurement instruments in research of digital education of healthcare professionals.
Methods: Cochrane methodology for systematic reviews; and, systematic review of psychometric properties using the COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) criteria.
Results: Our preliminary review of evidence identified that over 90% of RCTs of eLearning of healthcare

professionals use measurement instruments without adequate validity and reliability evidence for assessing knowledge, skills, attitudes, satisfaction or professional competencies.
Conclusions: This causes difficulties in making meaningful comparisons between studies; undermines the credibility and trustworthiness of research leading to biased results; and, prevents the evidence from being widely adopted into routine health professionals' education and clinical practice guidelines. Taken together, these factors can compromise the welfare of patients and adversely affect the advance of eLearning research, raising methodological and practical concerns.

1113
The reporting quality of diagnostic accuracy studies in the urology literature

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Background: Transparent study reporting is a critical aspect of high-quality primary clinical research and subsequent evidence synthesis. For studies of diagnostic accuracy, the Standards for Reporting of Diagnostic Accuracy Studies (STARD) statement that was initially developed in 2003 and updated in 2015, describes minimal reporting requirements for such studies.
Objectives: To formally assess the reporting quality of diagnostic accuracy studies in the urology literature.
Methods: A PubMed search using the Clinical Query function supplemented by hand-searching was performed of 4 major urology journals (JU, Eur Urol, BJU Intern and Urology) for studies published from January through December 2015 relating to questions of diagnostic accuracy. Two independent reviewers performed study selection using Covidence and performed data abstraction in duplicate using a piloted form based on the 30 individual STARD 2015 criteria. We performed descriptive statistical analysis using SPSS version 24.
Results: The search yielded 818 studies of which 67 were reviewed in full-text with 63 studies ultimately meeting inclusion criteria. The median number of STARD criteria met was 19.5 (interquartile range: 17.0 to 20.5). Fifteen of 30 criteria (50%) such as reporting of clinical background (#3; 100%) and study eligibility criteria (#6; 95.2%) were reported by at least 80% of studies. Meanwhile, reporting was poor for 6 of 30 criteria (20%), namely sample-size considerations (#18; 4.8%); study registration (#28; 4.8%); protocol access (#29; 6.3%); handling of missing data (#16; 7.9%) and indeterminate values (#15; 15.9%); as well as adverse-event reporting (#25; 15.9%).
Conclusions: Reporting quality of STARD criteria in diagnostic accuracy studies published in the urology literature varies widely by criteria with poor reporting for 1 in 5. There is an important need to raise greater awareness for the importance of transparent reporting of diagnostic accuracy studies, in particular for these select criteria.

1114
Syndrome element diagnostic rating scale of traditional Chinese medicine

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Background: Traditional Chinese Medicine (TCM) doctors want to promote TCM to the world. Treatment according to syndrome differentiation is the character of TCM and is based on the different experiences of different Chinese Medicine doctors. But the more different treatment according to syndrome differentiation has, the more difficultly Traditional Chinese Medicine promotes.
Objectives: The research on the syndrome element diagnostic rating scale of TCM provides the diagnostic rate, which can help the TCM promoting. We use an example of diabetes mellitus (DM) and diabetic kidney disease (DKD), which is its most important and common complication.
Methods:602 DM&DKD patients were included. Used the frequency method to filter TCM signs, clustering method and factor analysis to analyse the syndrome element from the sings, correlation coefficient method and logistic-

regression analysis to find the signs-syndrome belonging relationship. Scaled each sign by logistic regression analysis and diagnostic threshold by ROC curve. 150 DM&DKD patients were used to check the diagnostic rate.
Results: There were 29 signs of TCM after filtering the 61. And clustering method and factor analysis analysed 8 syndrome elements from the signs. After confirming the signs-syndrome belonging relationship and scaling each sign, each syndrome element`s diagnostic threshold, qi deficiency (20), blood deficiency (18), yin deficiency (14), yang deficiency (13), heat syndrome (18), qi stagnation(20), damp-heat (19), blood stasis (9), were scaled. The checkout, the sensitivity (85%-100%), the specificity(76.69%-98.76%) and the correction(79.60%-97.51%), proved the syndrome elements diagnostic rating scale well.
Conclusions: Syndrome element diagnostic rating scale of TCM is an effective and convenient way to reach the TCM. It helps the persons who don`t know TCM well diagnosing syndrome, which is very meaningful to promoting TCM.

1115

Is there any similarity between Uncle Scrooge and the pharmaceutical companies in anesthesia clinical outcomes? A systematic survey

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Background: There is evidence in the literature that research sponsored by the pharmaceutical industry is more likely to have favourable outcomes.
Objectives: To determine whether there is an overestimation of the true intervention effect in clinical trials sponsored by pharmaceutical companies compared to non-industry-sponsored studies in anaesthesia clinical outcomes.
Methods: We searched Medline, EMBASE, the Cochrane Central Register of Controlled Trials (CENTRAL), and LILACS for randomised-controlled trials comparing inhalation versus intravenous anaesthetics for adults undergoing on-pump or off-pump coronary artery bypass grafting that reported mortality within 180 days of surgery and/or use of inotropes. Studies should have also reported the funding source.
Results: Twelve studies (n=1782 participants) were included. Pooled estimates of 7 RCTs suggested a significantly increased risk of mortality on studies sponsored by pharmaceutical companies [Relative risk (RR) 0.45, 95% confidence interval (CI) 0.23 to 0.89; I2 = 2%; p = 0.02] versus non-industry-sponsored studies (RR 0.21, 95% CI 0.01 to 4.24; I2 = not applicable; p = 0.31). Estimates of the use of inotropes suggested similar results (RR 0.71, 95% CI 0.48, 1.06; I2 = 27%; p = 0.09 versus; RR 0.77, 95% CI 0.47 to 1.26; I2 = 74%; p = 0.30, respectively), although there is a larger absolute risk reduction (ARR) in the studies sponsored by pharmaceutical companies (29%) compared to those non-industry-sponsored (23%).
Conclusions: There is a similarity between drug companies and Uncle Scrooge related to some economic interests that can cause biased actions. Like Uncle Scrooge, who sometimes takes questionable paths to get to his money, pharmaceutical companies may be using overestimation of the magnitude of treatment effects on their clinical trials. Current evidence is not definitive nor generally realistic, and more careful research is warranted to verify this tendency in other medical areas.

Attachments: Figure 3. Pooled analysis of risk ratios from randomized controlled trials related to mortality. Panel A studies sponsored by pharmaceutical company. Panel B nonindustry-sponsored studies..jpg, Figure 4. Pooled analysis of risk ratios from randomized controlled trials related to use of inotropes. Panel A studies sponsored by pharmaceutical company. Panel B nonindustry-sponsored studies..jpg

1116

An example of policy makers as consumers throughout the systematic-review cycle

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Background: There is increasing acceptance of the value of involving consumers, including policy makers, in prioritisation, production and dissemination of systematic reviews.
Objectives: To describe a collaborative partnership model between a research team and policy makers, with particular focus on ways in which policy makers are involved as consumers throughout the systematic-review cycle.
Methods: Case-study method with the phenomenon of interest being consumer involvement throughout the systematic-review cycle.
Results: The collaborative partnership between a research team and policy makers from social welfare directorates in Norway is characterised by high-level involvement by policy makers at multiple stages throughout the systematic-review cycle: 1) In the organisational and review production process: Policy makers prioritise review topics, serve as advisory group members, participate in working groups, and comment on protocol- and review drafts. This includes providing clear rationale for reviews and identifying factors that influence the transferability of the review findings to their context. 2) In consideration of accessibility: Policy makers are partners in plain-language summary preparation and provide guidance about readability of reviews and summaries, e.g. by removing jargon. 3) In promotion activities and knowledge transfer: Policy makers collaborate with the research team on conference-based activities, outreach and awareness raising for evidence-based health and welfare policies. The partnership model ensures relevance of reviews, a transparent and inclusive review process, and a balanced presentation of results and implications, with the end goal of improving the uptake of evidence in social welfare policy. The most important barrier to involvement is the lack of guidance on consumer involvement.
Conclusions:A partnership model of consumer involvement by policy makers throughout the review cycle has clear benefits. While the degree of benefit may be proportional to the level of investment, there is a need for additional documentation on the structures and processes that derive the greatest benefit.

1117

Physical Activity: How well does systematic-review evidence on physical activity interventions reflect the expressed views of older people?

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Background: Physical inactivity can have profound effects on physical & mental health. Despite extensive research & policy activity in this area, guidelines for physical activity (PA) levels are poorly met across all age-ranges & this declines with age. Only 6% of people in the UK aged 65+ meet guidelines of 150 mins of moderate PA/week.
Objectives: To understand if highly researched interventions reflect what older people themselves say about what helps or hinders them staying physically active. This presentation will illustrate how we undertook this mixed-methods synthesis, as well as its findings.
Methods: We conducted a qualitative-evidence synthesis (QES) of research about older people & PA. We also conducted a mapping review of existing, relevant quantitative systematic reviews. Using our conceptual framework, we compared whether the expressed views of older people were reflected in high-level research on interventions.
Results: We synthesised findings from 55 qualitative research studies & mapped the results of 18 quantitative systematic reviews (of 518 studies). Walking emerged as important in both reviews. Social aspects of activity were key to many people's expressed motivations, while intervention studies tend to emphasise individual, behavioural factors. People focused on pleasure & enjoyment, as well as maintaining a sense of belonging & independence. The QES showed activity was multi-purpose; not exclusively driven by fitness & health, but by the ways in which

this enabled a sense of connection to local communities and peer groups. Neither review identified information about upstream influences such as policy or environmental factors that can encourage PA.
Conclusions: The motivations & pleasures of older people in relation to PA are not well reflected in interventions that are included in reviews & likely to be promoted through evidence-based public health. This reflects a recent assessment of public health studies which shows a predominance of individual-level interventions. More attention to enjoyment, sociability & practical concerns of being physically active might be more appropriate. More research on upstream factors is also needed.

1118

Evidence-base and guideline recommendations of patent traditional Chinese medicine for acute lower respiratory tract infections

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Background: The patent traditional Chinese medicine (PTCM) sales totaled 35.04 billion dollars in 2015, and PTCMs used in respiratory tract diseases were 10.88% - 12.61% of all diseases in 2007-2014, ranked fourth. Relevant guidelines were few.
Objectives: To compare the evidence base (results of systematic review) of orally taken PTCMs for acute lower respiratory tract infections (ALRTIs) with the recommendations in clinical practice guidelines.
Methods: We searched PubMed, Cochrane Library, Embase and four Chinese databases until September 2016 for 1) randomised controlled trials (RCTs) testing orally taken PTCMs for ALRTIs, to conduct a systematic review; and, 2) clinical practice guidelines for ALRTIs containing PTCM recommendations, to evaluate the quality of the guidelines and the PTCM recommendations. Two reviewers independently screened study, extracted study data and assessed risk of bias. Agreements were achieved. Quality of evidence/guidelines was assessed with GRADE approaches. Evidence base and recommendations in guidelines were compared.
Results:4808 literatures were identified. 31 RCTs (5454 patients) were included for systematic review. PTCMs compared to placebo reduced severity of cough (3 trials, 948 patients, risk ratio (RR) 2.50, 1.16 to 5.43; low certainty); increased global rating of success (3 trials, 948 patients, RR 1.70, 1.44 to 2.01; low certainty); reduced global assessment of severity of symptoms (1 trial, 478 patients, RR 4.01, 2.76 to 5.81; moderate certainty). 22 trials (4740 patients) compared effects of different PTCMs. 18 PTCMs were recommended in traditional Chinese medicine guidelines for ALRTIs. 16 of them had no evidence from clinical trials.
Conclusions: The evidence base of PTCMs for ALRTIs was weak. Few TCPMs were recommended in guidelines. However the recommendations were based on almost no clinical research evidence. Rigorous clinical researches are badly needed to inform the massive clinical use. Further training in evidence-based medicine methods for traditional Chinese medicine guideline developers are greatly needed.

1119

The influence of pet therapy in anxiety reduction among undergraduate nursing students

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Background: A growing body of evidence suggests that pet therapy is a successful and cost-effective method for improving the self-reported and perceived mental health and well-being of university students (1,2,3). Therapy dogs were first introduced into Canadian universities in 2012 at the University of Ottawa(4). Pet therapy, using dogs, has been shown to reduce test anxiety (1,4), aid in relaxation, and improve human interactions (with other

participants) (5). Therapy dogs are a cost-effective (no cost) non-traditional method of anxiety reduction that may serve as an important mental health service for those who might otherwise avoid seeking help due to the stigma surrounding traditional mental health services or to those who may only need support during stressful periods such as during exam time. In this presentation a unique collaboration among three universities will be discussed.
Objectives:1) Discussion of a unique, interprofessional, multi-university research collaboration will be described; and, 2) a three-pronged research approach, including two systematic reviews and a quasi-experimental study, will be explored.
Methods: Through this collaboration, two systematic reviews, one quantitative and one qualitative, were initiated to inform a research initiative aimed at exploring the impact of pet therapy on anxiety reduction among undergraduate nursing students. This study is aligned with the roll out of the university mental health strategy for students. In a recent campus-wide survey at the university among our students, results showed students "expressed feeling overwhelmed (90%), lonely (64%), very anxious (58%), or very sad (67%) at some point in the year prior". The interprofessional research team for this study, made up of professors, librarians, graduate and undergraduate students, initially met through a Joanna Briggs Institute training session and will describe their journey in learning about and conducting systematic reviews.
Results: The research has received ethics approval and is in progress. Preliminary results of the two systematic reviews and subsequent research intervention will be presented.

1120
Three years' of experience of implementing an evidence-based nursing training programme and its clinical outcomes in a medical centre in Taiwan

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Background: Evidence-based nursing (EBN) practice is the leading strategy for advancing the nursing profession to a modern style which is more efficient and effective. Introducing the evidence-based practice concept and method to clinical nurses, and measuring its outcomes are great challenges for nursing administrators.
Objectives: 1) To develop a 1-year standardised training programme and implement it for 3 years; and, 2) to measure the nurses' achievements based on the Joanna Briggs Institute evidence model.
Methods: The training programme was developed by the nursing research committee in the Department of Nursing. The education session contained two parts, the first part was mainly teaching the 5A steps of evidence-based practice for 5 days. The second part focused on clinical practice. The trainees were divided into several groups, an EBN-trained tutor was assigned to a group for a year, coached the group to formulate a PICO question related to their work environment and went through the 5A steps. After the training programme, the outcomes were measured based on the JBI model of evidence-based healthcare. All PICO questions and the clinical-implementing status were analysed by two reviewers.
Results: After 3 years of training sessions, 34 PICO questions were generated in total; and 31 PICO questions completed the 5A steps. 25 PICOs were submitted abstracts and were accepted at international conferences, including 19 oral and 6 poster presentations, and 13 PICOs have won EBN rewards from different government-funded institutions in Taiwan. Four PICOs were published in peer-reviewed journals within 2 years. Furthermore, the result of one PICO was integrated into the clinical nursing standard in the study hospital and disseminated into the daily activity of nurses through the nursing informatics system. Another PICO changed the nursing standards of procedure in the clinical setting.
Conclusions: The findings of this study could provide recommendations and strategies for future implementation of the EBN training programme for clinical nurses, and as a reference for nursing researchers and educators.

1121
Effect of video demonstration on choice of epidural labour analgesia in a Nigerian tertiary hospital

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Background: Labour pain is an inevitable experience for parturient with choice for labour analgesia depending on awareness, mothers' level of education, tradition, availability and cost of analgesic materials which is often limited by fear of complications that may arise.
Objectives: To determine the effect of a video demonstration on the willingness to receive epidural labour analgesia and to ascertain the factors responsible for the willingness in a Nigerian tertiary hospital.
Methods: All pregnant women attending booking clinics in 2 different units of our hospital were recruited into a randomised-controlled trial. The women were randomly allocated into either interventional (Group A) or control group (Group B). The pregnant women in the intervention group were shown a video demonstration on epidural labour analgesia in addition to distribution of information leaflets on the subject. There was no exposure of such information on epidural in the control group. Data obtained were entered into a predesigned sheet and analysed using SPSS version 16.
Results: Of the 199 expectant mothers that participated in the study, 95 (47.7%) were in Group A and 104 (52.3%) in Group B. The mean age in years of Group A (31.17±4.14) and Group B (31.05±5.00). In both groups, 69 (34.6%) patients have heard about labour analgesia out of which 22 (11.1%) were epidural. Level of education also had no effect on the awareness of epidural between the two groups (p=0.98). A higher proportion of Group A participants when compared to Group B participants were willing to receive epidural analgesia in their next labor and this difference was statistically significant (43.2% vs. 12.5%; p<0.0001).
Conclusions: Awareness of epidural labour analgesia is low but sensational programme through media has increased the willingness of mothers to request for epidural pain relief when next in labour. Adequate follow-up is necessary to actualize future epidural analgesia in parturients.

1122

Adolescent mothers' access and use of maternal health services in sub-Saharan Africa: Scoping review protocol

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Background: Poor access and low utilisation of maternal health services by adolescent mothers is a major public-health concern in sub-Saharan Africa. Underutilisation of such services is due in part to fear of being stigmatised and embarrassed for being pregnant, perceived lack of confidentiality and privacy, cost and distance to access services. To the best of our knowledge no scoping review has been undertaken in sub-Saharan Africa on this issue.
Objectives: To generate the best available evidence on factors influencing access and utilisation of maternal health services by adolescent mothers in sub-Saharan Africa.
Methods: A three-step search strategy will be employed. An initial limited search of MEDLINE and GLOBAL HEALTH (CABI) will be followed by an analysis of the text words contained in the title and abstract, and of the key terms used to define the papers. A second a search will use all identified keywords and index terms across other included databases (PubMed, ISI Web of Knowledge, PsycINFO, Embase, CINAHL and POPLINE). Thirdly, the reference list of all identified reports and articles will be searched. Study selection will be limited to the English language but not by any time period. Authors of primary studies will be contacted for further information if the need be. Comprehensive findings will be placed in defined categories in a table of results.

Results: Socio-demographic, cultural, economic, and other factors that facilitate or inhibit adolescent mothers' access and use of maternal health services.
Conclusions: Recommendations on further reviews, primary studies, possible interventions and policy directions will be made based on findings of this review.

1123
The choice of analysis in controlled before-after studies and its impact on effect size and statistical precision

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Background: Non-randomised study designs, especially controlled before-after (CBA) studies using aggregate level data, are increasingly used to evaluate policies and programmes in the fields of healthcare, public health, social welfare and education. Most researchers, however, use suboptimal or even inappropriate analysis methods, which may lead to distorted conclusions about the intervention effect. It is important to understand the implications of different analysis methods for the findings of individual studies as well as for the conclusions of systematic reviews.
Objectives: We assessed the influence that different analysis methods commonly applied in CBA studies have on the size of the effect estimate and the associated precision.
Methods: We re-analysed a previously conducted CBA study by Paudel et al. (2017) 'Impact of the Community-Based Newborn Care Package in Nepal: a quasi-experimental evaluation', examining impacts of a government programme on a range of behaviours influencing neonatal health in 10 intervention and 10 propensity score-matched control districts. We performed the following pre-defined analyses: - comparison of post-intervention means between intervention and control groups; - comparison of pre- and post-intervention means of the intervention group only; - comparison of pre-post mean differences in intervention and control groups; and, - difference-in-differences analysis. We also assessed the effect of adjusting for clustering by district or not.
Results: The different analysis methods yielded differential impacts of the Community-Based Newborn Care Package, with insufficient use of the data as well as unit of analysis errors leading to imprecision of the effect estimates.
Conclusions: The choice of analysis can influence the estimated direction of intervention effect, effect size and statistical significance. Commonly applied methods for analysing CBA studies can lead to misleading conclusions if the analysis fails to fully exploit the collected data, or to take clustering effects into account. It is important for systematic reviewers to re-analyse incorrectly analysed CBA studies.

1124
Community perceptions of safe motherhood in Ethiopia: a qualitative needs assessment activity informing the educational component of an intervention study

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Background: Reducing maternal mortality and improving child health outcomes are global priorities stated by the United Nations. Ethiopia, despite recent improvements, has one of the highest rates of maternal mortality globally (nearly 700 deaths/100 000 live births), and performs poorly in terms of maternal and child health (MCH) service use. The Safe Motherhood Project, a randomised cluster intervention trial led by Jimma University and the

University of Ottawa, explores the implementation and scale-up of MCH initiatives in Jimma, Ethiopia.
Objectives: A needs-assessment activity was conducted to gather evidence to inform the design of a community-based information, education and communication (IEC) intervention. This research aimed to better understand perceptions of health and illness, cultural and religious beliefs relevant to MCH, and preferences about MCH IEC activities.
Methods: Qualitative data were collected at 6 rural sites in Jimma Zone through focus groups with community members, and interviews with health workers, the development army and religious leaders. 36 transcripts were translated into English, coded and analysed.
Results: Major themes included: MCH experiences; MCH traditions and beliefs; roles in promoting MCH; and MCH information sources. Participants mentioned various factors contributing to healthy pregnancies (e.g. workload, diets, hygiene) and signs of unhealthy pregnancies (e.g. nausea, vomiting, bleeding). Problems were thought to be caused by excessive exertion during pregnancy, failure to use health services and/or the will of God. Participants described harmful traditional practices and beliefs (e.g. removing baby teeth, swallowing butter, consulting traditional birth attendants), which are now done in a hidden way. Participants elaborated on the responsibilities and contributions of various groups in promoting MCH: husbands, family/community members, religious leaders, health workers, development army, and government.
Conclusions: Based on the findings, IEC modules for health workers, development army and religious leaders were developed to reinforce healthy concepts and encourage strategies to overcome barriers.

1125
Trial results in clinical trial registries – towards more transparency in clinical research

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Background: Clinical research generates knowledge which is the basis for decision making in healthcare and further research. A prerequisite is that information on ongoing research and the results are made publicly available in an unbiased, complete manner as early as possible after study completion, suitably processed for different purposes and indications. Clinical trial registries are widely accepted and used, and results should be posted in trial registries.
Objectives: The main objective of this pilot project is to analyse how many terminated trials provide results in German Clinical Trials Register (DRKS) and in which format.
Methods: Interventional trials registered with DRKS (completed for >1 year, conducted in Germany) have been identified. A 10%-sample was drawn and analysed to see whether and in which format results were posted in DRKS.
Results: 55 out of 124 trials posted results in different manners (link to publications, uploaded reports etc.). On an enquiry about existing results to all other principal investigators, 42 out of 69 answered, 21 forwarded results and 10 indicated that publication of results would occur in the next few months. By conducting a literature research (PubMed, Google Scholar, etc.) we will try to find more results.
Conclusions: Providing results of all trials is an urgent need. Clinical trial results should be made available to all interested stakeholders: researchers, patients, clinicians and healthcare providers. Scientists should be encouraged and facilitated to provide trial results information to trial registries.

1126
Expanding opportunities: Policy lessons from economic randomised evaluations to reduce early marriage and childbearing in Africa and South Asia

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Policy Issue: Girls who marry early are more likely to have lower educational attainment, be socially isolated, have early and high-risk pregnancies, be at risk of sexually transmitted infections, and experience intimate partner violence. Childbearing during adolescence is associated with high-risk complications and increased risk of mortality. Multiple factors can contribute to girls' early marriage and childbearing, including limited knowledge of sexual and reproductive health, limited bargaining power within the household or community, and/or limited educational or labour-market prospects. However, other than legal bans, there remain limited policy approaches. Evidence synthesis: In recent years, economists have conducted several randomised impact evaluations of innovative programmes designed to produce new insights on how to reduce early marriage and childbearing in developing countries. This research has contributed to a growing body of rigorous evidence of what works and what does not work to achieve these policy goals in different contexts. This presentation will feature key findings from a synthesis of 10 randomised evaluations of programmes that sought to intervene with both girls and their parents through information provision, empowerment and/or financial and in-kind incentives. We will share actionable policy lessons for decision makers searching for cost-effective ways to improve the health and well-being of girls and young women in low-resource settings.

1127

Moving from pilot to scale in refugee settings: An evidence-informed conceptual framework for the Humanitarian Education Accelerator

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Background: The Humanitarian Education Accelerator (HEA) program was set up by the Department for International Development, UNICEF, and UNHCR. It aims to generate evidence to inform the scale up of high-potential pilot education projects.The challenges of scaling up education programs are magnified in refugee settings, where only 50% of the children attend primary school (UNHCR, 2016).
Objectives: We present a synthesis of the evidence on how to effectively scale up education programs in refugee settings. The synthesis serves to create a conceptual framework that identifies factors that enable and impede the effective scale-up of education programs.
Methods: We searched for and included quantitative and qualitative studies that focus on 1) scaling up education programs in refugee settings, 2) scaling up education programs outside refugee settings, and 3) scaling up other programs in refugee settings. We included a broad range of evidence because evidence on the scale up of education programs in refugee settings is limited (Burde et al. 2015). We developed a conceptual framework by building on McClure & Gray (2015), who identified several factors that contribute to effectively scaling up education programs. Our framework distinguishes between the pilot phase, the scaling-up phase, and the scaling-out phase (when programs are adapted to new contexts).
Results: Traditional gender norms, security concerns, and high mobility of refugees are the main barriers in the pilot phase. The success of the scaling-up phase depends on the dependence of the program on foreign donors and staff, and teacher quality. Government bureaucracy is the main barrier when programs are supposed to be implemented at scale.Programs that were adaptable to different contexts were most effective in scaling out to different contexts.
Conclusions: We identified barriers and facilitators toward effectively scaling up education programs in each of the phases in the scaling up process. Primary studies, such as the 5 impact and process evaluations we conduct under the HEA, should examine these barriers before recommending the scale up of education programs in refugee settings.

Attachments: ConceptualFramework.png

1128

Involving perceptions of children with asthma in the controlled-exercise intervention – the PLAY framework

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Background: Within exercise interventions for children and adolescents with asthma, control and standardisation are emphasised which may challenge patient involvement. Involving patients in research may improve the methodology and outcomes of the research.
Objectives: We aimed to develop an active-play exercise intervention for children and adolescents with asthma accommodated for a future randomised-controlled trial by involving children and adolescents with asthma and evaluating their on-site perceptions of participation.
Methods: In the `PhysicaL activity, an Asthma and Youth (PLAY)-study´, we piloted a 6-week active play exercise intervention in six 10-12-year-old children with asthma. Each of 2 weekly 60-min exercise sessions consisted of 10-15 min warm-up, 30-35 min of endurance-based activities, and 5-10 min cool-down. Endurance activities were designed as team games, relays and tags. Evaluation included measures of attendance rate and exercise intensity, and qualitative field observations and focus-group interviews of participating children.
Results: Participating children reported satisfaction and enjoyment which increased their effort, and were especially enthusiastic about ball games and obstacle courses. No withdrawal from exercise activities because of asthma were observed. Children reported exercise instructors as encouraging and kind, distributing their attention to each individual participant and making it easier to manage intense exercise. Attendance rate was 90% and exercise intensity was ≥80% of maximal heart rate for two thirds of endurance activities. Observations revealed easy-to-master activities, an inclusive atmosphere, humor, and mutual participation by peers with asthma.
Conclusions: The construction of the controlled active-play exercise intervention environment targeting relatively high exercise intensity was accommodated to children´s own premises of satisfaction, enjoyment, mastering and participation. The design and methodological framework are well suited to proceed and involve 13-15 and 16-18-year-old participants, and refine and accommodate exercise activities and the intervention environment to adolescents´ premises.

1129
Implementing and evaluating a remedial education programme in Kenyan' refugee camps

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Background: The Equity in Education in Refugee Camps in Kenya (EERCK) is a programme that provides remedial education to classes 7 and 8 refugee girls in Kakuma and Dadaab camps. The programme aims to improve learning outcomes, increase school retention, and transition to secondary education of 1280 refugee girls. The programme also aims to increase community awareness about the importance of girls' education. The remedial programme is offered in a context where girls face a variety of challenges in attending and staying in school. Extreme poverty, social norms that do not emphasise the importance of female education, early marriage, or violence along the route to school or at schools may prevent families from sending their girls to school out of safety concerns. The remedial programme operates 5 hours during the weekends when the school term is on and for two weeks when the schools close.
Objectives: Generate rigorous evidence about the impact of the programme on school attendance, retention, learning outcomes, and non-cognitive outcomes. Moreover, generate deep understanding on how the program works, how the programme is being implemented, barriers to implementation or adoption, and mechanisms of impact. These pieces of information are expected to answer, how the program is functioning, how it could be improved, and how it could be successfully scale up.
Methods: To evaluate the remedial programme, qualitative and quantitative research methods will be employed

in the study. In Kakuma camp, a randomised-controlled trial will be used to evaluate the impact of the program, where eligible girls are selected to receive the program by lottery. In Dadaab, a regression discontinuity design will be used instead.
Results: Currently, data analysis of the baseline findings is taking place and results will be shared at the Summit.
Conclusions: Conclusion will be derived at after the results have been received and shared by the conference period.

1130

Combination antiretroviral treatment use in PMTCT programmes: 6-week HIV prevalence and relationship to time of ART initiation and mixed feeding

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Background: Zimbabwe is one of the countries worst hit by the Human Immunodeficiency virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) scourge with an estimated 1.4 million people living with HIV. 16% of pregnant women aged 15 to 49 years are infected with HIV. More than 90% of HIV infection in children is through mother-to-child transmission (MTCT), and about two thirds of such infections occur during pregnancy and delivery while the rest occur after pregnancy. We investigated the effectiveness of the Option B+ in reducing HIV infection and factors associated with HIV transmission among infants born to mothers enrolled in the PMTCT programme.
Methods: We randomly selected 1204 early infant HIV-diagnosis test results for HIV-exposed infants and linked these results to maternal clinical records at primary healthcare clinics in Harare to estimate the prevalence of MTCT and to determine clinical factors associated with MTCT of HIV at 6 weeks.
Results: Of the 1204 infants in the study, 2.5% (95% CI: 1.7 to 3.5) were infected with HIV at 6 weeks post-delivery. Antiretroviral adherence reduced the odds of HIV infection by about 99% [OR 0.01 (95% CI 0.00 to 0.06)]. Both mixed feeding [OR 3.89 (95% CI 0.92 to 16.50)] and late initiation of ART (after delivery) [OR 3.18 (95% CI 0.42 to 23.94)] increased the odds of HIV infection.
Conclusions: Early initiation of combination antiretroviral treatment reduces 6-week mother-to child transmission of HIV in PMTCT programmes to levels similar to those found in controlled trial settings. Exclusive breastfeeding remains important even in the presence of ART.

1132

A review on healthcare prioritisation in low- and middle-income countries

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Background: There are few studies on the process of priority setting in some low- and middle-income Countries (LMICs). There are no reviews of the actual process of priority setting in these countries, specifically, reviews aimed at understanding the approaches employed and its impact on healthcare decision making in the published literature. Hence the need for this review of primary research papers on health care prioritisation in low- and middle-income countries.
Objectives: The aim of this review was to describe the approaches used, identify facilitators and barriers and to identify outcomes or impacts of the process of prioritisation.
Methods: A systematic review was carried out with articles obtained from searches in fifteen databases including grey literature, between October 2015 and December 2015. The intervention sort for was any priority setting method in any level of healthcare provision in a low- or middle-income country with an aim of improving health

service, developing policy or allocating health resource. The QARI instrument by Joan Briggs institute was used for quality appraisal. A thematic data extraction was done. The extracted data were analysed descriptively.
Results: Only 9 studies were identified. The use of policy guidance, cost and burden of disease consideration were identified as the commonest approach to health care prioritisation. The barriers and facilitators were similar across the studies, and were grouped into 6 domains - political, technical, organizational, financial, contextual and process factors. The influence of each domain differed based on organisational level not necessarily based on countries. None of the identified studies achieved a perfect outcome, with one study recording a failure in implementation.
Conclusions: The findings from the review, suggests that there is a need for proper integration of the priority setting process specific to the contextual setting and organisational context to ensure its efficient use. Furthermore, most perceived barriers could be effectively transformed to facilitators when appropriately managed.

Attachments: Prospero systematic review on priority setting in health care - Copy.pdf

1133
Evidence mapping of therapeutic interventions for Gastrointestinal Stromal Tumours (GIST)

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Background: Gastrointestinal Stromal Tumours (GISTs) are the most common mesenchymal tumours. The evidence in this research field is broad and the body of evidence is scattered and expanding.
Objectives: The purpose of this evidence-mapping (EM) project is to identify, describe and organise the current-available evidence about therapeutic interventions on sarcomas.
Methods: We conducted an EM based on the methodology proposed by Global Mapping Initiative. The stages of the process were: (1) Setting the boundaries and context of the evidence map: We consulted the World Health Organization classification and oncology experts; (2) Searching and selection of systematic reviews: We conducted searches in PubMed, EMBASE, the Cochrane Library, and Epistemonikos from 1990 to March 2016; the former was updated in November 2016; (3) Data analysis: We obtained general characteristics from systematic reviews (SRs) and the specific research questions addressed in these documents; and, (4) Synthesising findings: We displayed the information in tables and bubble plots.
Results: This mapping was based on 17 published SRs including 66 individual studies conducted between 2001 and 2014. Of the total studies included, 43 were observational studies, 15 were randomised-controlled trials (RCT), and 8 were phase II clinical trials. According to the clinical spectrum we divided the PICOs into patients with localised GIS and patients with unresectable and/or metastatic GIST.The majority of the interventions reported as 'beneficial' were palliative. Only 3 studies evaluated quality of life as an outcome and none of them conducted an economic evaluation. Overall, the quality of the SRs according to AMSTAR was moderate to high (see the bubble plot).
Conclusions: The most common type of study used to evaluate therapeutic interventions in GIST sarcomas has been non-experimental studies. However, the majority of interventions are reported as beneficial or probably beneficial by the respective authors of SRs. Evidence mapping is a useful and reliable methodology to identify and present existing evidence about therapeutic interventions.

1134
Quality evaluation indicators of health services in China's Village clinics: a systematic review

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Background: The village clinic is the most important organisation of primary healthcare and the most powerful security of health undertakings in rural areas in China. However, increasing challenges in China's Village clinics are a key issue of concern faced by the government.
Objectives: This study aims to systematically review the existing quality evaluation indicator systems of health services in China's Village clinics.
Methods: Literature searches were conducted of 8 electronic databases for evaluation of article quality. This included Google Scholar search engines, the World Health Organization (WHO) website, and reference lists of relevant studies which applied inclusion/exclusion criteria. Inclusion articles were assessed using Ekman's quality assessment checklist. Study characteristics, methods for indicators establishment and application, and indicator content performance. The thematic synthesis was used for qualitative and descriptive analysis.
Results: Twelve studies were included. Three of these achieved the highest grade (three-star), while 2 studies reported control or alternative comparison in detail. Ten studies were cross-sectional; and the other 2 were before-after contrast studies.Seven studies applied the evaluation indicator system of the service capacity of village clinics to examine the quality of primary health service, 5 of these studies investigated the quality evaluation indicators on health service before they applied ,the frequent indicators were distributed mainly in human resources for health service, medical equipment, housing and service capabilities. Five studies investigated the quality of rural public health services and applied 5 evaluation indicator systems, with the frequent indicators involving infrastructure for public health, immunisation, infectious disease management and chronic disease management.
Conclusions: The evaluation indicators on health service in China's Village clinics are still not uniform. It is important to investigate unified quality evaluation indicators on health service and establish a set of improvement mechanisms.

Attachments: Quality evaluation indicators on health service in China's Village clinics ： a systematic review.pdf

1135

An exploratory analysis for identifying factors associated with the primary care physicians' interpretation of the rigor of overstated abstract conclusions

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Background: Abstracts of clinical research often exaggerate the positive findings and emphasise the beneficial effects of intervention beyond the actual findings mentioned in the corresponding full texts. Boutron et al. suggested these overstatements had an impact on clinician's interpretation. However, the characteristics of clinicians who are susceptible to overstatement are unknown. Objective: To explore factors associated with primary care physicians' interpretation of the rigor of overstated abstract conclusions Method: This study was a secondary analysis of a randomised-controlled trial (RCT) that evaluated the influence of overstated abstract conclusions on primary care physician's impression of the intervention (unpublished, trial registration: UMIN000025317). The original eligible criteria were volunteers among medical doctors of the Japan Primary Care Association; clinical experience of ≥2 years; currently in clinical practice; having chance to get information on new

clinical research/trials. In the present study, we included the participants who were assigned abstracts with overstatement in the RCT. Our primary outcome was rating the overstated abstract conclusion as 'rigor'. We examined the association between clinicians' factors and the primary outcome using multivariate logistic-regression model. Result: Among the 286 included participants, 127 (44%) rated the abstract as 'rigor'. Increased postgraduate year (PGY) was associated with higher proportion of rigor rating on the overstated abstract (Adjusted odds ratio [AOR] 1.04, 95% confidence interval [CI] 1.01-1.08). Inexperience of principal investigator for clinical research was also associated with increased risk of rigor rating (AOR 2.95, 95% CI 1.65-5.29). PhD and board certification were not associated with lower risk of rigor rating (AOR 1.25, 95%CI 0.69-2.28, and AOR 2.69 95%CI 0.99-7.27, respectively). Conclusion: Longer PGY and inexperience of clinical research were found to increase the clinicians' interpretation of the rigor of overstated abstract conclusions.

1136

Effectiveness of population-based risk-reduction programmes in reducing risky sexual behaviour among young people in low- and middle-income countries: A systematic-review protocol

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Background: Risk taking is inherent in young people (aged 10 to 24 years old) as they grow to adulthood; the choices they make during this phase of life could enhance or diminish their future health and well-being. Culture, economic disparities, political decisions and social support or lack of it contribute to sexual risk taking. Changing social structure, migration patterns, disasters, globalisation, developments in computerised communication media among others place young people at risk sexually. Adverse health outcomes such as sexually transmitted infections, including Human Immunodeficiency virus/acquired immune deficiency syndrome and unintended pregnancies are among the consequences of sexual risk taking. Public health sexual risk reduction programmes target groups of young people by providing age and context-appropriate interventions to reduce risk taking, prevent the outcomes and complications of such risks.
Objectives: The objective of this review is to synthesise the best-available evidence on the effectiveness of population-based risk-reduction programmes and services on sexual risk taking among young people in low- and middle-income countries.
Methods: Publications will be assessed using a 3-step search strategy. Randomised-controlled trials and in their absence, quasi-experimental studies will be considered. Two independent reviewers will assess for methodological validity, extract and synthesise data using standardised critical-appraisal instruments from the Joanna Briggs Institute Meta Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI).
Results: Anticipated outcomes would include measures related to reduction in risky sexual behaviour among young people such as time to sexual initiation, number of sexual partners, condom use generally and at first sex, consistent and correct contraceptive (condom) use during sexual encounters [condom use skills] and self-efficacy in negotiating safer sex.
Conclusions: Recommendations will be made for further primary studies, reviews or policy and programme guidelines aimed at reducing sexual risk taking, its outcomes and complications in low- and middle-income countries.

1137

Evidence-based practice for nebulised gentamicin for bronchiectasis

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Background: Bronchiectasis occurred in a 89-year-old man with chronic obstructive pulmonary disease. The inhaled aminoglycoside antibiotic (80mg gentamicin in 2ml normal saline 3 times a day for 5 days) was administered via a tracheostomy tube because of renal insufficiency during hospitalisation.
Objectives: Gentamicin was generally used as intramuscular or intravenous injection. We aimed to confirm the efficacy of inhaled gentamicin based on an evidence approach.
Methods: Setting, patient, intervention, comparison and outcome were established (PICO, Table 1) to form a therapy question. In the Pubmed, Cochrane and other databases, using MeSH terms and Boolean logic combinations (Bronchiectasis AND (Inhaled OR Aerosolized OR Nebulized) Gentamicin) for the literature search. Filters were activated to randomised-controlled trials, published in the last 10 years, in humans. Finally the literature (Am J Respir Crit Care Med. 2011 Feb 15;183(4):491-9.) was selected for appraisal using the Critical Appraisal Skills Programme (CASP) checklist.
Results: Baseline characteristics of the experimental group were similar to the control group (P>0.05). Losses to follow-up were less than 20% in the study. Although the design was a single-masked study, indicators such as the primary microbiological endpoint were not influenced by subjective consciousness. Gentamicin inhalation for bronchiectasis reduced inflammation markers (P<0.05), re-exacerbate rate (P<0.0001), and bacterial density (P< 0.0001) (Tables 2-3). However, no significant differences were found in the pulmonary function test. 21.9% patients reported bronchospasm and received beta-2 agonist treatment. The level of evidence (Oxford Centre for Evidence-based Medicine, OCEBM) was 2 and the grade of recommendation was B.
Conclusions: We found nebulised gentamicin to be a reasonable therapy for patients with renal insufficiency. Our patient's condition was relatively stable after this treatment. Bronchospasm did not occur till after he was discharged. Gentamicin inhalation twice daily was recommended more than three times a day according to the literature and a consideration of drug costs in Taiwan.

Attachments: Table 1.jpg, Table 2.jpg, Table 3.jpg, Key literature selected to appraisal.pdf

1138
The updated JBI Model of Evidence-Based Healthcare

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Background: The Joanna Briggs Institute Model for Evidence Based Healthcare, first conceptualised in 2005, was presented as a developmental framework of evidence-based practice. It sought to situate healthcare evidence and its role and use within the complexity of practice settings globally.
Objectives: The objective of this work was to re-examine the Model and its component parts to see whether they remain relevant and a true and accurate reflection of where the evidence-based movement is today.
Methods: A citation analysis was conducted using the index citation of the original source paper on the JBI Model by Pearson and Colleagues. The databases searched were PubMed, Web of Science and Google Scholar from year of publication (2005) to July 2015. Duplicates and articles in languages other than English were removed and all results were imported and combined in an Excel spreadsheet for review and analysis. This was followed by a process of stakeholder engagement that involved focus-group discussions with the staff of the Joanna Briggs Institute and broader Joanna Briggs Collaboration during the 2015 annual general meeting. These data were recorded then transcribed for review and consideration.
Results: The citation analysis revealed that, despite being cited over 200 times by academics, health professionals and policy makers, the Model itself was rarely used to inform or direct policy or practice. Equally, the stakeholder consultation confirmed that there was a need to ensure the language utilised in the Model was internationally appropriate and in line with current international trends.
Conclusions: The new Model for Evidence Based Healthcare details the intricacies of the relationships between systems and individuals across different settings and the need for contextual localisation to enable policy makers and practitioners to make evidence-based decisions at the point of care.

1139

Development and validation of a search filter for studies on patient's values and preferences

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Background: When making decisions, it is important to incorporate the preferences of patients regarding their options and, more specifically, the relative importance patients place on health outcomes. There is a growing interest on this topic, however, there is little guidance on how to retrieve efficiently research evidence for its assessment in systematic reviews, clinical guidelines or other type of decisions.
Objectives: To develop and validate a search filter for the retrieval of studies in this topic in MEDLINE (using Pubmed)
Methods: We constructed a 'gold standard' performing a handsearch of high-volume journals, and a random sample of MEDLINE articles. Eligibility and classification of relevant articles was performed in duplicate; discrepancies were solved by consensus. We performed term-by-term searches in MEDLINE (via PubMed) using an initial list of terms developed by our group, and other terms provided by experts in the field. We used a diagnostic test accuracy assessment framework to calculate sensitivity, specificity, precision, and accuracy of each term comparing the search results from the database with the articles included in the '"gold standard'. We combined the search terms in multiple permutations to identify the combination with the best sensibility, specificity and balance within specificity and sensibility. We validated these filters using a subset and recalculated sensitivity, sensibility, precision and accuracy.
Results: We are currently conducting the term-by-term searches. We will present the characteristics of the gold standard and the filters with their corresponding sensitivity, specificity, precision, and accuracy at the Summit.
Conclusions: The proposed filter will fill an important gap in research, facilitating the retrieval of studies on this topic. This, in turn, will facilitate the development of systematic reviews, and the incorporation of this type of evidence when developing recommendations and other type of decisions.

Attachments: flow.jpg

1140

Developing an R package for dynamic and web-based updating of reviews

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Background: Updating reviews can be a laborious process when it includes updating all the data from meta-analyses into the text, tables and figures included in an original report. Further, static presentation of reviews in print publications limits the access of end users to all the available meta-analysis and the evidence.
Objectives: The objective of this project was to develop a web-based tool that could be used to facilitate updating a review, and in particular, updating the output from R meta-analysis packages into the updated written report. A second objective is to enable presentation of the review (text and any meta-analysis) online in an interactive interface.
Methods: To achieve the objectives, we make use of the tools for reproducible and dynamic reports already available in R such as knitR or markdown. We also use Shiny to create a web-based interface for writing

the dynamic reports, updating the meta-analysis results and displaying the results. while remaining user friendly. The package makes use of output from current R meta-analysis packages, and is flexible enough to read different output models from several meta-analysis packages in R. The use of Shiny enables us to organise the review information and display any primary data and meta-analysis results in a user-driven interactive dash board.
Results: The package is currently in development and will be presented at the Summit.
Conclusions: The main advantage of this R package will be to enable a ready access to a modern web-based application for conducting and updating a systematic review for any topic or team, rather than independent of group-specific review production tools.

Poster session 2 Thursday: Evidence synthesis - methods / improving conduct and reporting

2001
Title Proposal Forms: How we are and how we should be

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Background: Previous studies have shown that titles registration is problematic, particularly for non-English speakers. Unfriendly or unclear title registration could kill the enthusiasm of potential authors and impose a waste of time both to authors and Cochrane review groups (CRGs). The Cochrane Equity Task Force is reviewing the current policy.
Objectives: -To describe the Intervention and Diagnostic Review Proposal Form (RPF) and Overview Proposal Form (OPF), formerly called a Title Registration Form, of all CRGs. -To propose a unique RPF and OPF considering most CRGs' requirements.
Methods: Descriptive cross-sectional study, analysing accessibility, frequency, content and order of form's domains of the 52 CRGs authorised to register titles. Unique forms will be analysed by the Equity Task Force and other stakeholders as a component of a new title registration policy under study.
Results: We analysed the 52 Intervention RPFs. One CRG, is currently not accepting titles. Direct links to RPF were not available (17), under 'Resources' (25), 'Get involved' (6), and others (4). We found important differences in headings, content or heading order of RPFs, and frequently broken links. There is also a great variability regarding author team resources/skills required (Table 1). Out of the 35 CRG publishing Diagnostic Test Accuracy protocols or reviews, 9 provide direct links to RPF. We found no important content difference among these RFPs, that follow closely the Cochrane generic model. Out of the 28 CRG with Overviews at any stage, 2 provide direct links to OPF, that were identical to the Cochrane generic model. Conclusion: We found great variability regarding the route access and the content of Intervention RPF. The absence of direct links to the form is frequent, particularly Diagnostic RPF and OPF. Those who prepare the reviews, the major product of Cochrane, are mostly healthcare professionals who volunteer to work in Cochrane review groups. Therefore, registering titles should be a clear and transparent process to avoid frustrating experiences. The absence of a unique online forms imposes barriers.

Attachments: Table 1 RPFs.jpg

2002
Optimising rapid-review production: New search filter to identify simultaneously systematic reviews, guidelines, health-technology assessments and RCTs in PubMed

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Background: Rapid reviews have emerged as an efficient approach to synthesising evidence using simplified processes. Filters capable of capturing systematic reviews, guidelines, RCTs and health-technology assessments

(HTAs) at once could improve the efficiency of literature search. PubMed lacks a common query for these study designs together. IECS has been performing rapid HTA for more than 10 years, and developed in the process an encompassing filter.
Objectives: To assess the diagnostic accuracy of a search filter to identify systematic reviews, guidelines, and RCTs in PubMed, compared to the current available tools of PubMed.
Methods: We will prospectively select consecutive rapid HTAs to be undertaken during 2017 by our HTA agency (Institute for Clinical Effectiveness and Health Policy -IECS- Buenos Aires, Argentina) for which the search in PubMed, without any filter yields less than 500 records (in order to have a manageable universe of citations and be feasible to our team). The search without any filter will be considered the reference standard; the IECS filter (Box 1) the index test, and the combination of PubMed's clinical queries (narrow and broad) for systematic reviews and RCTs, and 'Guideline/Practice Guideline' article type, as the alternative test. Since there is no specific tool to identify HTAs in PubMed we will exclude them for the analysis. The identification of relevant studies from the screening by title and abstract, and by full-text of potentially eligible studies will be performed by a researcher and verified by a second researcher. Finally, the retrieval rates of relevant references using both tests under comparison will be characterised and compared. Results and conclusions: Results showing diagnostic accuracy of the both IECS filter and the alternative test, and its interpretation, will be presented at the Summit.

2003
Predatory publications in evidence syntheses

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Background: Predatory publications are academic journal publishers who use unethical business practices, minimal or no peer review or limited editorial oversight to publish journals that are below a minimally accepted standard of quality. These journals are increasing exponentially and have potential to alter results of research syntheses.
Objectives: The authors seek to determine if papers published by a major predatory publisher are being cited in systematic reviews, by whom and under what circumstances.
Methods: Using citation management software, we will download citations for articles published by a known predatory publisher in the medical and health fields. Using forward reference searching, we will determine if these articles are being cited in systematic reviews. Results and
Conclusions: Results are not yet available. While not everything published in predatory journals is fraudulent or otherwise faulty research, determining the extent of predatory journal impact on research syntheses will help determine how widely used these journals are and whether quality control for individual journal articles at the research synthesis level needs more rigour.

2004
Assessing the prognostic power of prediction rules: A Users' Guide to the medical literature

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Accurate prognostic information is fundamental to optimal clinical care. Patients and clinicians can use their intuition and average risk from observational studies to estimate prognosis. The best approach to assess patient prognosis, however, relies on models that simultaneously consider a number of prognostic factors and provide an estimate of patients' absolute risk of an event. Such predictive models or rules should be characterised by

adequate discrimination - differentiating patients who will have an event from those who will not - and adequate calibration - ensuring accurate prediction of absolute risk. We have developed a Users' Guide to understanding the available metrics for assessing discrimination, including the area under the receiving operator curve and c-statistic; calibration, through comparison of observed and predicted risks; and the relative performance of two different models by risk-reclassification analysis. This presentation will use real-world examples to demonstrate concepts and apply results from studies evaluating predictive models. This guide complements an existing Users' Guide that addresses the development and validation of predictive models. Together, these guides will allow clinicians to make optimal use of existing prediction models.

2005

Challenges faced and lessons learned from doing overviews of systematic reviews of complex interventions

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Background: We are conducting an overview of systematic reviews of interventions to improve food security in low- and middle income countries (LMICs). For overviews covering broad topics and complex interventions, selecting eligible studies, extracting useful data, and synthesising and presenting results in a meaningful way can be challenging.
Objectives: To highlight methodological challenges faced when conducting overviews of systematic reviews of complex interventions; and to suggest approaches to address these challenges.
Methods: We describe the challenges we encountered when selecting eligible systematic reviews, extracting data and presenting the findings for our overview. Furthermore, we asked colleagues who had done overviews before for guidance on ways to overcome the identified challenges. We also searched for published examples of overviews of systematic reviews of complex interventions. We drew on these sources to identify potential approaches to address the challenges we faced.
Results: Table 1 details the challenges encountered regarding study selection, data extraction, quality assessment, and summarising and presenting results of our overview. Potential approaches to address these challenges were drawn from input from three colleagues; one paper on the risk of bias in overviews; one systematic review, and five overviews of systematic reviews. We also drew on tools such as AMSTAR, ROBIS, SUPPORT summary checklist, and critical appraisal worksheets for intervention questions.
Conclusions: Although some of the challenges of doing overviews of systematic reviews may be unique to the specific overview question, many may have been encountered by other researchers. It is valuable to share experiences and learning to inform future approaches.

Attachments: Table 1.pdf

2006

Cochrane Crowd: Using citizen science to meet the challenge of information overload in evidence production

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Background: At a time when research output is expanding exponentially, citizen science, the process of engaging willing volunteers in scientific research activities, has an important role to play in helping to manage the information overload. It also creates a model of contribution that enables anyone with an interest in health to contribute meaningfully and in a way that is flexible. Citizen science models have shown to be extremely effective in other domains such as astronomy and ecology.
Objectives: Cochrane Crowd (crowd.cochrane.org) is a citizen science platform that offers contributors a range of micro-tasks, designed to help identify and describe clinical trials and diagnostic studies.
Methods: The platform enables contributors to dive into needed tasks that capture and describe health evidence. Brief interactive training modules, and agreement algorithms help ensure accurate collective decisions. Contributors work online or offline; they can view their activity and performance in detail. They can choose to work in topic areas of interest. As contributors progress, they unlock new tasks.
Results: Cochrane Crowd was launched in February 2016. Three micro-tasks are available: RCT identification and diagnostic test accuracy (DTA) identification, and PICO (Population, Intervention, Comparator and Outcomes) extraction at citation level. The Cochrane Crowd community comprises 5000 contributors from 117 countries. Over 1 million individual classifications have been made, and 32 000 reports of randomised trials have been identified for Cochrane's Central Register of Controlled Trials. Evaluations to assess crowd accuracy have shown crowd sensitivity is 99.1%, and crowd specificity is 99%. Main motivations for involvement are that people want to help Cochrane, and people want to learn.
Conclusions: This model of contribution is becoming an established part of Cochrane's effort to manage the deluge of information produced in a way that offers contributors a way to get involved, learn and play a crucial role in evidence production.

2007

The effect of incorporating RobotReviewer suggestions into risk-of-bias assessments conducted within Covidence

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Background: Machine learning in health-evidence synthesis is moving forward rapidly. As these technologies mature and become more widely available, it is essential that their effect on accuracy and efficiency is rigorously assessed. Covidence is an online platform that streamlines completion of systematic review tasks, including title/abstract screening, full text review, quality assessment (Risk of Bias, RoB), and data extraction. RobotReviewer is a web-based tool which uses machine learning to semi-automate specific tasks in evidence synthesis, including RoB on user-uploaded PDFs.
Objectives: The purpose of this experiment was to determine the effect of incorporating the suggestions of the RobotReviewer machine learning algorithms into RoB assessments conducted within Covidence (experimental), when compared to human-only, conventional RoB assessment (control).
Methods: We randomised studies (1:1) included within systematic reviews to semi-automated or human-only RoB assessment. In the experimental condition, one of two reviewers was presented with RobotReviewer suggestions (judgement and supporting text) and then asked to complete their assessment. In the control condition, two reviewers completed their assessments without RobotReviewer suggestions. Main outcomes were time to complete assessments (efficiency) and differences between semi-automated and human-only assessments (accuracy).

Results: The results of the randomised study described above will be presented, including the main outcomes of effect on time to complete assessments and assessment accuracy.
Conclusions: Results of this study will contribute to our understanding of the potential benefits and disadvantages of RobotReviewer-generated RoB assessments, and more generally the use of machine learning in the extraction tasks of a systematic review. Rigorous assessments of new, semi-automated evidence systems will form a foundation for effective and appropriate use of emerging technologies.

2008

Assessment of publication bias based on clinical trial registrations

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Background: In the assessment of publication bias, a funnel plot is often used if at least 10 trials are available. If fewer studies are available, assessment of publication bias is more difficult. In the systematic reviews (SR) conducted at the HTA (Health Technology Assessment)-centrum in Region Västra Götaland, Sweden, we have searched for ongoing trials in the Clinical Trials database and reported relevant trials. This information was not used for assessment of publication bias during the study period.
Objectives: To study if www.clinicaltrials.gov is a useful tool for assessing publication bias in SRs.
Methods: We retrospectively reviewed all SRs conducted at the HTA-centrum during 2009 to 2016. Publication bias was reassessed, including the information found in Clinical Trials at the time when the SR was conducted. If the recruitment of patients in a registered study had been completed at the time of the search in www.clinicaltrials.gov, the publication status was investigated. The NCT number and/or the name of the principal investigator and the key words were used in PubMed, Embase, the Cochrane Library and Google Scholar to find publications within 2 years after the completion of the study. In each case it was evaluated whether publication bias was present and would have been a reason for downgrading the certainty of evidence.
Results: During the study period, 68 SRs were published and 2 of those had noted publication bias as a contributing reason for downgrading the certainty of evidence in any of the outcomes. Sixty-five SRs included a search in www.clinicaltrials.gov and in 48 of those there were relevant registered trials for the question at issue (median number of studies 4, range 1-98). In 24 SRs it was noted that at least 1 trial had completed recruitment (median 1, range 1-16), and 8 studies in 6 SRs had not been published 2 years later. In 3 cases publication bias was considered as being present and would have caused downgrading one level of the certainty of evidence.
Conclusions: The use of Clinical Trials may contribute to the overall assessment of publication bias and may influence the certainty of evidence.

2009

The agreement of treatment-effect estimates from rapid reviews using abbreviated literature searches and traditional Cochrane reviews: A meta-epidemiological study

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Background: Rapid reviews have become a pragmatic alternative to traditional systematic reviews by streamlining methodological processes such as literature searches, aiming for faster provision of decision-relevant information. The agreement of effect estimates obtained from abbreviated literature searches as conducted in rapid reviews and those obtained from extensive searches as performed in Cochrane or Campbell reviews is unknown.
Objectives: To assess differences between treatment effects estimated from abbreviated and extensive literature searches.
Methods: We selected 44 Cochrane reviews published between 2012 and 2016 on diverse topics that had a binary outcome in the main summary of findings table (a subset of randomly selected reviews used for a related project [1]). We constructed 14 variants of abbreviated searches based on the original CSRs search strategy by combining searches in MEDLINE, Embase, or CENTRAL with or without searching of reference lists. From the first binary outcome's meta-analysis of each CSR, we extracted trial results, recorded for each trial which abbreviated search variant identified it, and calculated a summary treatment effect estimate per search variant (summary odds ratio, sOR) including only trials identified by that variant using random-effects meta-analyses. We then determined how often sORs of abbreviated and original searches differed in the direction, in the inclusion of the null (i.e. nominal statistical significance), and beyond chance (i.e. the ratio of sORs excluded the null). We follow an epidemiological approach to evaluate the overall relationship of treatment effect sizes derived by abbreviated and original searches in an overarching meta-analysis across all 44 ratio of sORs.
Results: Analyses are ongoing and results will be available at time of the Summit.
Conclusions: Our results will systematically quantify the impact of faster and abbreviated searching on treatment effect estimates across a wide range of CSR topics. [1] Nussbaumer-Streit et al. Assessing the validity of abbreviated literature searches for rapid reviews: protocol of a non-inferiority and meta-epidemiologic study. Sys rev. 2016;5:197

2010

Overviews of reviews: Unique challenges and opportunities of synthesising syntheses

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Background: Syntheses of syntheses, otherwise known as overviews, have become an increasingly prevalent approach to synthesising research. Although overviews are becoming prevalent, they are a relatively nascent and undeveloped synthesis method that pose unique methodological challenges. While significant empirical work has been undertaken to inform and improve systematic review methods, limited research and guidance is available for overviews.
Objectives: To examine the methodological quality of overviews and provide guidance for the conduct and reporting of overviews.
Methods: A systematic search for overviews that aimed to synthesise more than one empirical education-related review was conducted in multiple online databases and grey literature repositories. Two authors independently screened and selected studies and extracted data using a standardised codebook. Studies were analysed descriptively; we aimed to elucidate all aspects of the overviews and calculate the proportion of characteristics reported across 17 different methodological characteristics. We also compared methodological quality and reporting of recent overviews to early overviews using t-tests.

Results: Twenty-five overviews met eligibility criteria for this study. Our analysis revealed that many commonly reported aspects of systematic reviews were regularly unreported. Of the 25 overviews included, 11 used a narrative synthesis technique (44%) whereas 14 used a quantitative analytic technique (56%). Overview authors rarely took into account overlap between reviews or up-to-datedness of reviews.
Conclusions: Overviews offer an exciting, yet challenging new method for synthesising and managing the ever-expanding volume of research. Given the issues and limitations identified in this study, care must be taken in interpreting and using extant overviews. Moreover, to ensure the validity and utility of overviews to inform practice and policy, it is important that the conduct and reporting of overviews improve. As a result of this study, we developed conduct and reporting guidelines for overviews which will be presented and discussed.

2011
Calculating confidence intervals for a net-effect estimate

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Background: Evidence-based medicine (EBM) is the integration of clinical expertise, patient values and current best evidence into the decision-making process for patient care. Practicing EBM involves determining the balance of benefits and harms for an individual patient, including consideration of all important outcomes and their relative importance. A decision analysis has previously seemed too complex for routine use in practicing EBM.
Objectives: We developed a simplified decision-analysis model to combine effect estimates for important outcomes and report a net effect estimate with a 95% confidence interval.
Methods: Statistical formulas for combinations of effect estimates were evaluated to understand the assumptions necessary for their use. Practical methods were devised to represent these concepts for clinical decisions and the process was demonstrated with three clinical examples.
Results: Assumptions for use of the model are that effect estimates: 1) have data that conform to a normal distribution; 2) are independent and not correlated with each other; and, 3) are expressed using the same units of measure. Each effect estimate is assigned a multiplier which conveys relative importance and converts all effect estimates to reference unit of measure. Statistical formulas to derive standard deviations of the mean from confidence interval widths for each effect estimate, then produce a 95% confidence interval for a net effect estimate, do not require statistical software.
Conclusions: For relatively simple decisions (choosing between options without dependencies on a series of decisions) with understanding and acceptance of three initial assumptions, a simple decision analysis can be used to generate a net effect estimate with a 95% confidence interval to determine the likelihood of net benefit or net harm. This model could be used for individual decision making with the individual's preferences defining the relative importance multipliers. For population-level recommendations as occurs in guidelines, the range of plausible relative importance multipliers can be used for a sensitivity analysis to identify preference-sensitive decisions.

2012
Underestimation of depression screening-tool sensitivity when using lay-administered, fully structured diagnostic interviews as the reference standard

Levis B[1], Benedetti A[1], Riehm KE[1], Sadaat N[1], Levis AW[1], Azar M[1], Rice DB[1], Thombs BD[1], DEPRESSD Investigators .[2]

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Background: Previous studies on the diagnostic test accuracy of depression-screening tools have treated both clinician-administered semi-structured diagnostic interviews and lay-administered fully structured interviews as gold standards for assessing major depressive disorder (MDD). Fully structured interviews do not involve clinical judgement and are considered potentially more reliable but less valid than semi-structured interviews, overdiagnosing MDD among patients with low-level symptoms. No studies have assessed the impact of using fully structured interviews as the reference standard in meta-analyses of diagnostic test accuracy.
Objectives: To compare the sensitivity and specificity of the Patient Health Questionnaire-9 (PHQ-9) depression screening tool using semi-structured vs. fully structured diagnostic interviews as the reference standard.
Methods: We conducted an individual patient data meta-analysis of the diagnostic accuracy of the PHQ-9. Electronic databases were searched from January 2000 to December 2014 for datasets that compared PHQ-9 scores to MDD diagnosis based on a validated interview. For PHQ-9 cutoffs 5-15, we estimated pooled sensitivity and specificity among studies using semi-structured and fully structured diagnostic interviews separately.
Results: Data were obtained from 43 of 53 eligible studies (81%), for a total of 14 405 patients (1,763 MDD cases). Estimates of specificity were similar using semi-structured or fully structured interviews as the reference standard (within 2%); however, estimates of sensitivity were underestimated by 5-22% (median = 18%) using fully structured compared to semi-structured diagnostic interviews (Table 1).
Conclusions: Estimates of PHQ-9 sensitivity are consistently underestimated when using fully structured diagnostic interviews as the reference standard. Due to their lack of validity, fully structured interviews lead to an artificially inflated number of MDD cases, which the PHQ-9 is unable to capture. When deciding which interviews to conduct in research settings, the poor validity of fully structured interviews should be considered.

Attachments: Table 1.png

2013

Are clinician-administered semi-structured interviews and lay-administered fully structured interviews equivalent gold standards for major depression? An individual patient data meta-analysis

Levis B[1], Benedetti A[1], Riehm KE[1], Sadaat N[1], Levis AW[1], Azar M[1], Rice DB[1], Chiovitti MJ[1], Thombs BD[1], DEPRESSD Investigators .[2]

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[2] N/A, N/A

Background: Existing meta-analyses on the diagnostic test accuracy of depression screening tools have treated both clinician-administered semi-structured diagnostic interviews and lay-administered fully structured interviews as equivalent gold standards for assessing major depressive disorder (MDD) and combined accuracy results across interview types without adjustment. Fully structured interviews do not involve clinical judgement and are considered potentially more reliable but less valid than semi-structured interviews. No studies have assessed whether semi- and fully structured interviews differ in the likelihood that MDD will be diagnosed.
Objectives: To evaluate the association of interview method with odds of MDD diagnosis, controlling for depressive symptom scores and patient characteristics.
Methods: We analysed data collected for an individual patient data meta-analysis of the diagnostic accuracy of the Patient Health Questionnaire-9 (PHQ-9). Binomial Generalised Linear Mixed Models with a logit link were fit (outcome: MDD; predictor: interview method; covariates: PHQ-9 score, patient characteristics, and setting (e.g. primary care, specialty care)). An interaction between interview method and PHQ-9 scores was assessed.
Results: 17 158 patients (2,287 MDD cases) from 57 studies were analysed. Compared to other fully structured interviews, the odds of MDD diagnosis were significantly higher for the Mini International Neuropsychiatric Interview (MINI) [OR (95% CI) = 2.10 (1.15, 3.87)]. Compared to semi-structured interviews, fully structured interviews (excluding MINI) were more likely to diagnose MDD among patients with low depressive symptom levels (PHQ-9 ≤ 6) [OR (95% CI) = 3.13 (0.98, 10.00)], and less likely to diagnose MDD among patients with high depressive symptom levels (PHQ-9 ≥ 16) [OR (95% CI) = 0.50 (0.26, 0.97)] (Figure 1).
Conclusions: The likelihood of MDD diagnosis appears to depend on the diagnostic interview used to assess MDD.

Meta-analyses on depression screening tool accuracy should consider methods to account for possible differential verification bias.

Attachments: Figure 1.png

2014

National guideline development - collaboration across nations

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Background: The overarching goal of the Norwegian and Swedish Health Authorities is to provide good health and care on equal terms for the entire population. The National Health authorities spend a lot of resources to improve health and social care through evidence-based recommendations in national guidelines. It is of particular interest to explore strategies to lower costs by increasing collaboration across nations in national guideline development.
Objectives: Collaboration across the National Authorities in Norway and Sweden on the development of three national guidelines was explored as a strategy to improve efficiency and lower costs in guideline development.
Methods: The National Board of Health and Welfare in Sweden and the Norwegian Directorate of Health in Norway cooperated on the development of two national guidelines. The chosen topics were on dementia, drug abuse and stroke. The collaboration was limited to sharing of specified methodological tasks such as evidence generation and evaluation. PICOs were decided and prioritised separately by each country. Thereafter, relevant PICOs for collaboration were selected and split between the two countries. Results of the collaboration projects were evaluated in terms of usefulness of the work that was generated by the other country.
Results: The Norwegian and Swedish National guidelines on drug abuse, dementia and stroke were finalised for broad national hearings in 2014, 2016 and 2017, respectively. Unexpected differences between countries in specific methodological aspects, made the generated evidence less useful for the other collaborating country when addressing the shared PICOs.
Conclusions: The total costs to develop the national guidelines on dementia, drug abuse and stroke were somewhat different, but approximately similar per recommendation in all guidelines, in both countries. More resources may be saved if both organisations used the same tools and methods and worked even closer, including more frequent physical meetings especially during the early developmental stages. This would allow for earlier recognition and targeting of unexpected methodological differences that may occur.

2015

A principled and pragmatic critique of the use of confidence intervals and post hoc power analyses in systematic reviews

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Background: Confidence intervals (CIs) computed in frequentist statistics for the quantitative results of systematic reviews of the effects of interventions are recommended in the evidence-based practice literature (EBPL) in general and in the widely used approach known as the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. Post hoc power analyses (PHPAs), defined here as the statistical power analyses performed for the interpretation of the results, are recommended in the EBPL, including the optimal information size proposed in the GRADE approach.
Objectives: To provide a principled, constructive and pragmatic critique of the use of CIs and PHPAs in systematic

reviews, as recommended in the EBPL in general and in the GRADE approach to imprecision and to offer suggestions for improvement.
Methods: Assessment of the use of CIs and PHPAs in frequentist statistics informed by a critical review of the mathematical and applied statistics literature regarding CIs, Neyman-Pearson hypotheses testing and power analysis, augmented by insights from the statistical literature on fiducial inference, likelihood inference and confidence distributions. Statistical simulations and examples are discussed.
Results: Precision of the CIs is an initial precision, not a final precision; evaluation criteria for CIs other than the coverage and the length of the interval should be considered; the support provided by observed data for different proposed values for the unknown parameter are appropriately explored with likelihood inference, including likelihood functions and likelihood intervals, and with confidence distributions; PHPAs are misleading.
Conclusions: The use of CIs and PHPAs in systematic reviews as advocated in the EBPL and in the GRADE approach to imprecision is in contradiction with the mathematical and applied statistics literature, and should be revised. Suggestions for correcting the identified issues are provided.

2016
Reduce and recycle: Examining relevant, existing synthesised evidence to avoid research waste and refine the preparation of new systematic reviews

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Background: Between 2010 and 2014 the number of systematic reviews (SRs) and meta-analyses indexed by PubMed increased by 67% and 132%, respectively, compared to 27% for all indexed items. To avoid duplication and support the production of good-quality, useful SRs, it is important to critically examine existing, relevant synthesised research prior to starting a new SR. Objective: To describe our unit's approach to critically examining existing, relevant SRs to reduce research waste in order to refine and enhance the preparation of new SRs.
Methods: We purposively selected 8 projects from our unit over the past 5 years for which critical examinations of existing SRs were done. Through a consultation process and drawing on our shared experiences, we documented common approaches used, as well as the main learning points.
Results: All critical examinations started with a research question for a possible new SR that informed the development of a succinct protocol including PICOTS elements, well-defined objectives, a search strategy and methods for data extraction and management. All the critical examinations searched for existing, relevant SRs in at least 2 electronic databases, including databases with primary and secondary studies, such as PubMed and databases of systematic reviews only, such as Epistemonikos. Using an iterative process the question was refined or redefined, depending on the availability and scope of existing, relevant SRs. The search date and methodological quality of existing SRs were also considered in the decision-making process for each critical examination. An algorithm was developed to consolidate the common approaches that direct the course of the critical examination process. Conclusion: To map and examine the scope of existing, relevant systematic reviews before starting a new review is a necessary and valuable step before starting a new SR. This process reduces research waste, identifies and clarifies research gaps and refines or redefines the SR question, all of which streamlines the preparation of new SRs.

2017
Methodological quality of multiple treatments or network meta-analyses (MTAs) in type-2 diabetes mellitus (T2DM)

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Background: Traditional meta-analysis is limited to the direct comparison of two treatments. MTA has the advantage of being able to compare multiple treatments both by direct and indirect comparison. However, it is more methodologically complex, and hence more vulnerable to methodological risk compared to conventional pairwise meta-analysis. Lack of methodological rigour limiting the trustworthiness of the conclusion may mislead the evidence users. Objective:To assess the quality of evidence available for MTAs in the interventions for T2DM.
Methods: We searched CENTRAL, MEDLINE and other resources for publications of MTAs in interventions for T2DM. We used 'A Measurement Tool to Assess Systematic Reviews' (AMSTAR) to assess the methodological quality of published MTA on interventions for T2DM. Each of the 11 AMSTAR items was summarised using descriptive statistics.
Results: We included 48 heterogeneous MTAs from 23 journals and one health provider published from 2011 to February 2017. A total of 2246 primary studies and 1 010 582 participants with T2DM were included with 12.5% data missing. 92% included pharmacological treatments and 8% were updates of existing meta-analyses (MAs) or MTAs. Only one article performed well for all AMSTAR items. The poor performing items included providing lists of studies (10%), appropriate conclusion in respect to quality of included studies (16%), assessment of publication bias (16%) and presence of pre-planned protocol (18%) (Table 1). Better performing items included reporting unpublished data (45%), number of data extractors (53%), conflict of interest (59%) and assessment of quality of primary study (61%). Detailed description of included studies (71%) and methodologies of MA and MTA (80%) were the best-performing items. Conclusion: These methodological shortcomings may threaten the validity of conclusions and limit the use of these MTAs for clinical decision. We suggest assessment of methodological quality of MTA using validated tools, such as AMSTAR, complementing the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) Network Meta-analysis Extension statement for improving reporting quality.

Attachments: Table 1 MTA.pdf

2019

Improving the quality of systematic reviews through teaching: The Joanna Briggs Institute Comprehensive Systematic Review Training Program

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Background: The cornerstone of evidence-based healthcare is the systematic review of international evidence. Systematic reviews follow a rigorous, standardised approach in their conduct and reporting, and as such education and training is essential prior to commencement. The Joanna Briggs Institute (JBI) is one of many organisations that provides systematic review training and has recently revised their approach to training in terms of content, scope and delivery method.
Objectives: To provide an overview of the JBI Comprehensive Systematic Review Training Program (CSRTP) as one example of how to teach people to undertake systematic reviews, and describe how this programme has been adopted internationally.
Methods: Since 2003, the Institute have offered a systematic review training programme. A train-the-trainer programme was established and then rolled out across the globe, resulting in the creation of a global network of systematic review trainers. In 2016 a review and redevelopment of the JBI CSRTP was undertaken, including an evaluation and review of the course. Extensive consultation involving JBI staff and members of the Joanna Briggs Collaboration was undertaken during the 18-month process.
Results: The global training network have now trained thousands of people internationally to undertake systematic reviews of evidence following the JBI approach. This has been achieved through the creation of a train-the-trainer programme and a standardised set of materials. The structure of the course, the introduction of a blended approach, the amount of people trained and the reasons for participants undertaking the course will be discussed. Recommendations for similar organisations will be presented.
Conclusions: The JBI CSRTP has evolved over the last 15 years in order to adapt to developments in the systematic review process, new emerging methodologies, software development and the way in which people

learn.

2020

What is the methodological quality and transparency of depression clinical practice guidelines?

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Background: According to the World Health Organization, depression affects more than 300 million people worldwide. Moreover, depression is considered a global burden since it is the leading cause of disability.
Objectives: To assess the methodological rigour and transparency of clinical practice guidelines (CPGs) that recommend pharmacological treatment for depression.
Methods: We conducted a comprehensive search on 12 specific databases for CPGs. Inclusion criteria were CPGs for the treatment of depression in primary care and that comprised pharmacological recommendations for the adult or elderly, written in English, Portuguese or Spanish, and published between 2011 and 2016. CPGs designed for local use or for a specific population were excluded. Two reviewers screened CPGs for eligibility. Discrepancies were resolved through discussion between the reviewers. The methodological rigour and transparency of included CPGs were assessed by three reviewers using the instrument AGREE II. Differences greater or equal to 2 points between reviewers score was considered discrepant. Discrepancies were resolved by consensus between the 3 reviewers. A third reviewer was involved when needed. Overall CPG quality was classified as high, moderate and low with A to C grading (Figure 1).
Results: The search strategy retrieved 38 records, of which 15 were evaluated using the AGREE II (Table 1). Most CPGs were selected from the National Guideline Clearinghouse (NGC), were published in 2016 or 2015 (table 1) and were classified as high A (Figure 2). Domain 1 and 4 presented the greatest medians (Figure 3). The distribution of AGREE II scores can be seen in Figure 4.
Conclusions: Most of the included CPGs presented high quality. However, deficiencies in applicability and editorial independence were found. Besides the good technical quality, it is essential that CPGs become effectively an instrument to support clinical practice. Therefore, CPGs developers should improve the analysis of applicability and editorial transparency.

Attachments: Figure 1.tif, Figure 2.pdf, Figure 3.pdf, Figure 4.tif, Table 1.tif

2021

Taking it online: What to expect as you build online learning modules

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Background: Delivering effective training in systematic review methodology to an international audience is a

challenge. Self-directed online learning modules are often used to deliver such training.
Objectives: To review the experiences and lessons learned for Cochrane's Learning and Support Department in developing online learning courses, for the benefit of those embarking on similar initiatives.
Methods: Two major online learning projects have been conducted in 2016-17 to support Cochrane learners across the globe: •A set of 5 short modules on 'Common errors in production of Cochrane Reviews' enhancing skills of Cochrane Editors, produced mostly in-house. •A major revision of Cochrane's introductory online learning course authors of systematic reviews, with 9 large modules developed in partnership with Cochrane Methods Groups and an e-learning company Gomo and Adapt authoring tools used to enable development of multi-device, interactive online learning resources that can be easily edited and updated.
Results: The process of developing learning content and designing online learning resources was considerably time and resource intensive, even where working with external e-learning developers. Implementing e-learning authoring tools requires substantial time and effort, but has benefits in assisting learning design, editing final resources and developing new projects. Design of online learning requires specific expertise in effective learner engagement, instructional and visual design, and design of assessments. Detailed preparation of learning content is needed before the work of design and building into interactive online learning can commence. Engaging and managing contributions from stakeholders requires dedicated project management. Collection and management of data on learner activity requires careful planning, including access and certification to more complex learner pathways and evaluation of online learning resources. Cochrane established a parallel project to implement a Learning Record Store to manage such data.
Conclusions: Developing online learning is complex and resource-intensive, requiring specialist knowledge and detailed planning

2022

Comparison of the Academy of Nutrition and Dietetics Quality Criteria Checklist and Newcastle Ottawa Scale as risk-of-bias tools

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Background: Assessing the quality of studies included in systematic reviews is an essential step. Assessing quality of observational studies in nutrition research is very challenging due to the type of methodological complexities. There is a lack of agreement on best-available tools to assess the quality of observational studies.
Objectives: Compare Academy of Nutrition and Dietetics Quality Criteria Checklist (QCC) and the Newcastle-Ottawa Scale (NOS) as risk-of-bias assessment tools for cohort studies within a systematic review.
Methods: This study compared the NOS and QCC risk-of-bias assessment tools for a systematic review of cohort studies. Eight cohort studies were included in the systematic review. Two reviewers individually reviewed all the 8 articles using QCC and NOS tool. The NOS contains 8 items that assess selection bias, comparability of groups, and assessment of exposure and outcomes. The QCC contain 9 validity questions focusing on selection bias, detection bias, performance bias, attrition bias, and reporting bias. An overall score was generated for each study based on the two tools.
Results: In step one, we mapped the individual questions for both the tools to Cochrane's risk-of-bias domains (Selection, Attrition, Detection, Performance, other bias) and secondly, comparisons between the ratings for 2 tools for each domain were analysed. Mapping of each question for the 2 tools indicated that for the QCC tool questions were very well distributed across all the risk-of-bias domains (Selection domain: 2 questions; Performance domain: 2 questions; Detection domain: 2 questions; Reporting domain: 2 questions; Attrition domain: 1 question), whereas the NOS tool questions are more focused on selection-bias domain (Selection domain: 4 questions; Performance domain: 1 questions; Detection domain: 2 questions; Reporting domain: 0 questions; Attrition domain: 1 question). We are still in progress of calculating the inter-observer reliability status for both the tools.
Conclusions: QCC covers all domains of risk of bias, whereas NOS does not cover reporting bias and performance bias. Both the tools were easy to use.

Attachments: Table 1.pdf

2023
To annotate or re-annotate- what is the question?

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Background: Cochrane Pregnancy and Childbirth (CPC) has been part of a 6-month project with the Bill and Melinda Gates Foundation and key partners aiming to accelerate the delivery of a next-generation evidence system for curation of maternal and child health evidence. As part of this, reviews were annotated according to their PICO (Population, Interventions, Comparisons, and Outcomes). The CPC Information Specialist was involved in the Quality Assurance (QA) process, the main objective of which is to ensure a good match between terms chosen from controlled vocabularies and key concepts in the review.
Objectives: To look at a particular QA issue and reasons for re-annotation of reviews.
Methods: The annotation team used text in the Methods section of each review to annotate Population (P), Intervention (I) and Comparison (C). In some cases the QA specialist marked reviews for re-annotation because important concepts were missing from the Methods section and therefore the annotation did not accurately match the review question.
Results: We will report the number of reviews where re-annotation was needed following QA because there was an important aspect of the P, I or C missing from the Methods section. We will look at where else in the review this aspect was captured discuss how this will impact on future annotations.
Conclusions: If PICO annotations are based on text in the Methods section and this section is incomplete or ill-defined, this has implications for future annotations (both manual and automated), and consequently has implications for retrieval. It highlights the potential need for clearer guidance for review authors and more rigorous checking during the editorial processing of reviews. It is imperative that reviews clearly define these key aspects of the review question so that they can be more accurately annotated.

2024
Using mixed methods to identify successful school-based asthma interventions

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Background: An ongoing Cochrane Review of school-based asthma self-management interventions has identified a heterogeneous body of primary research. Participants, context, setting, mode, and content of interventions vary. Although previous reviews have demonstrated school-based asthma interventions may be effective, our review is using a mixed-methods design to develop an understanding of how the intervention might work, the effectiveness of different components, as well as informing the design of future interventions.
Objectives: This presentation focuses on 1) the rationale of using QCA and meta-analysis within a single review; 2) the analysis steps taken; 3) the results obtained in the QCA and their use in later stages of the review; and, 4) critically examines the challenges and benefits of using a mixed-methods design.
Methods: This study presents results from a 'fuzzy' set of QCA analyses that generates hypotheses about important intervention processes and design features that contribute to successful implementation. Domains of conditions were identified, and data-reduction strategies implemented, in order to keep the modelling

manageable and overcome potential problems regarding limited diversity. Configurations developed through QCA were tested in meta-analysis.
Results: We present our conceptual model providing our overall rationale for employing QCA before presenting the results of conditions that are sufficient to generate successful implementation. Some of the clearest results revolve around the use/specification of theory and we discuss the further meaning of this finding. We also present a number of causal recipes found to be sufficient conditions for triggering our outcome of interest, and describe the way in which these results are used within our meta-analyses.
Conclusions: The syntheses employed in this review explicitly recognise that both the intervention design, its implementation, and the context in which it takes place are important drivers of improving children's asthma self-management skills. QCA allows us to develop theories about the relative importance of these factors to test in meta-analyses of effectiveness.

2025
Incorporating the quality assessments of cohort studies in the interpretation of meta-analysis results using RevMan5.3 software

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Background: Newcastle-Ottawa Scale (NOS) for assessing the quality of non-randomised studies in meta-analysis is known as one of many useful tools being implemented in the field. However, the 'star system' for judgement on three broad perspectives including selection, comparability and outcome need further improvements to be more successfully incorporated with interpretation of meta-analysis results.
Objectives: To develop a summary presentation tool based on judgements on each items in Newcastle-Ottawa Quality Assessment Scale using RevMan5.3 software.
Methods: To develop a summary presentation tool for the methodological quality in non-randomised cohort studies, 4-staged process is executed. First, the quality assessment for 7 cohort studies under a systematic review is performed using NOS Scale. Second, there is a reform process for each item of risk of bias tables using properties in the characteristics of included studies using RevMan5.3 software. Third, after grading judgements and assigning colors, a summary presentation tool for non-randomised cohort studies is developed. Fourth, a reformed risk of bias items is then applied to the judgement.
Results: The judgement of 9 items of NOS Scale for cohort studies was presented with forest plot to be incorporated with meta-analysis results. Especially, it was easy to identify 'was follow-up long enough for outcomes to occur' in a sub-group analysis by follow-up years.
Conclusions: A reformed risk-of-bias summary presentation tool for non-randomised cohort studies is a simple and user-friendly tool that is well-incorporated with the results of meta-analysis.

Attachments: Forest plot and NOS quality presentation.pdf

2026
Disability inclusive elections in Africa: A systematic review of published and unpublished literature

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Background: The right to vote is critical to democracy. The United Nations Convention on the Rights of Persons with Disabilities advocates for equal participation of people with disabilities (PWDs) in political life. This review aimed to understand legislation, experiences and practices related to participation of PWDs in electoral processes and wider political life.
Methods: Relevant electronic databases and websites were searched for published literature. Experts were contacted and reference lists were reviewed to identify unpublished literature. Included studies were written in English, French or Portuguese, focused on the political participation of PWDs in Africa and were published from 2006 onwards. One reviewer screened identified studies; two reviewers independently extracted and appraised identified sources.
Results: In total, 54 documents (mainly grey literature) were included. The documents were diverse in design and content, nine focused on the global level; the remaining documents were country specific. Although most African countries ratified important disability-focused legislation, the implementation of the legislation varies. Challenges experienced by PWDs can be broadly categorised into three groups: (i) lack of education and financial resources; (ii) stigma and negative social attitudes; (iii) inaccessible physical infrastructure. The impact of strategies to support inclusive electoral and political processes remains unclear, the theory of change underpinning these strategies was generally poorly articulated and the effect of tested interventions was not reported using quantifiable methods. Most of the sources identified were of low quality.
Conclusions: Limitations of the literature identified suggest an urgent need to better evaluate and document the programmes aiming to improve political participation of PWDs in low- and middle-income settings.

2027
Challenges to validity in two applications of network meta-analysis to complex social interventions

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Background: Network meta-analysis (NMA) extends conventional meta-analysis to allow simultaneous comparisons between multiple interventions. NMA is well-established in biomedical research and now increasingly used and advocated as a way to synthesise evidence on multiple alternative complex social interventions.
Objectives: To investigate the feasibility, challenges, risks and benefits of NMA as a research synthesis method for comparing multiple complex social interventions.
Methods: Two NMA applications were compared using different strategies and datasets. The first application defined a network of prison-based drug treatments using clinical categories and then used multivariate design-by-treatment interaction NMA with subgroup analyses. The second defined an evidence network of probation and parole programmes using intervention component combinations and used Bayesian NMA.
Results: Over 50 studies were included in each review but the large number of interventions meant that both networks were sparse. Networks were also unbalanced and characterised by high levels of heterogeneity. Poor primary study reporting quality, including missing information about intervention designs, implementation and population characteristics, raised additional challenges. Statistical assessments yielded no evidence of inconsistency in either network but were underpowered in both.
Conclusions: A multiple treatment comparison and network perspective ensured that high-quality, relevant and previously-excluded evidence was taken into account. Gaps in the evidence base and problems with treatment rankings were more clearly identified than in previous pairwise meta-analyses. The utility of NMA for social interventions was, however, limited by network (1) sparseness (2) imbalance; and, (3) poor reporting. Little confidence could be placed on NMA results. Adherence to recently improved reporting guidelines; consensus approaches to intervention definitions; and primary research on complex social intervention mechanisms and evidence network features are needed to ensure that the potential benefits of NMA are realised and misleading conclusions avoided.

2028

Multilevel meta-analysis and qualitative meta-synthesis of a teacher classroom management programme: Cross-synthesising evidence for decision making

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Background/Aim: Children's early problematic behaviour correlates with later deviant behaviour. The Incredible Years Teacher Classroom Management (IY TCM) programme trains teachers to use proactive strategies to break negative patterns. Decision makers balance information on effectiveness, acceptability, and contextual appropriateness when selecting programmes to support children's mental and behavioural health. This multilevel meta-analysis and qualitative meta-synthesis answers: What is known about the effectiveness of IY TCM, and how do people experience the programme and its effects?
Methods: RCTs comparing IY TCM against treatment-as-usual or waitlist controls were included in the effectiveness strand. Qualitative interviews and focus groups with key stakeholders were included in the experiential strand. Primary outcomes were teacher management strategies and child conduct problems. Secondary outcomes included child prosocial behaviours. Electronic databases and relevant websites were systematically searched. Multilevel meta-analysis was applied to effect sizes from RCTs. Grounded theory analysis was applied to qualitative data. Cross-synthesis used framework analysis and integrative grids.
Results: Nine studies from England, Ireland, Jamaica, USA, and Wales were included. IY TCM had small effects on reducing negative management strategies and child conduct problems, and moderate effects on increasing positive management strategies. Effects were not statistically significant for increasing child prosocial behaviours. A cyclical process emerged in the qualitative strand. Teachers described benefits relating to increased knowledge, locus-of-control, emotional wellbeing, and practice. RCT and experiential findings were generally harmonious, although qualitative findings suggested a broader conceptualisation of benefits than were quantitatively measured.
Conclusions: IY TCM is effective for reducing problematic behaviours. Teachers report liking and benefiting from IY TCM. Systematically reviewing RCT and qualitative evidence on IY TCM provides comprehensive evidence across effectiveness, acceptability and context, offering a model for future research.

Attachments: GES 2017 Table 1 Multilevel meta-analysis results for primary and secondary outcomes.pdf, GES 2017 Figure 1 Cycle of learning from qualitative meta-synthesis.pdf, GES 2017 Figure 2 Teacher and classroom outcomes from qualitative meta-synthesis.pdf, GES 2017 Figure 3 Child outcomes from qualitative meta-synthesis.pdf

2029

Identifying and assessing study filters in searches for non-randomised intervention studies

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Background: Randomised-controlled trials show the least uncertainty in results as long as their methods are adequate and they are conducted in a manner suited to answer the study objective. However, in some cases, for example, where dramatic effects or very rare diseases are to be investigated, evidence from non-randomised intervention studies (NRS) might need to be included. In order to identify NRS in bibliographic databases it should thus be clarified whether it is possible by means of search filters to restrict the search to certain study types. NRS include a wide range of study types (e.g. controlled clinical trial, before-after study, cohort study). These studies may be difficult to identify in the literature, as "study design labels are not used consistently by authors and are

not indexed reliably by bibliographic databases" (1).
Objectives: The aim of the present analysis was the validation of existing search filters to identify NRS in MEDLINE using the relative recall approach on the basis of Cochrane reviews.
Methods: In an initial step we determined NRS study types (2) and existing study filters for NRS; for this purpose, we screened among others the website of the InterTASC Information Specialists' Sub-Group (3). Cochrane reviews evaluating NRS were identified via the Cochrane Database of Systematic Reviews. To create a reference set, the information on these NRS was extracted, together with the information on the study type, and the corresponding citations were identified in Medline. The search filters were examined with regard to the accuracy measures 'sensitivity' and 'specificity'. Results and
Conclusions: A total of 391 eligible Cochrane Reviews were identified. Data extraction and the testing of the search filters are currently being performed. The results and conclusions of our analysis will be presented at the Summit. References 1. Reeves BC. Chapter 13: Including non-randomized studies. URL: http://handbook.cochrane.org. 2. Hartling L. J Clin Epidemiol 2011; 64(8): 861-871. 3. InterTASC Information Specialists' Sub-Group. URL: https://sites.google.com/a/york.ac.uk/issg-search-filters-resource.

2030

More than Expert Searchers! How librarians are positioned to improve quality and reduce waste through knowledge-synthesis service standards

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Background: At the 23rd Cochrane Colloquium, we presented on a fledgling initiative at the University of Toronto Libraries (UTL) to develop a sustainable set of service standards in order to clarify roles and tasks performed by librarians involved with knowledge-synthesis (KS) research. We presented the preliminary results of a broad scan of service standards that existed at UTL and proposed that librarians start a conversation on what librarians' experiences have been so far in these type of initiatives. In the 2 years since Vienna, librarians have continued to be strong activists for their role on KS teams — not only as expert searchers but also as advocates for proper reporting and reduction of research waste. As this movement continues to gain momentum, UTL's initiative has evolved into the Knowledge Synthesis Service (KSS).
Objectives: To present an update on international efforts by librarians to clarify and advocate for their roles on KS teams. We will describe: 1) the range of library KS services; 2) how librarians advocate for proper KS reporting; and 3) service guidelines that libraries have put in place to regulate KS support. We will comment on how the service standards set by UTL's KSS was informed by the ongoing work of the medical librarianship community, as well as how overarching efforts to reduce research waste fueled the development and goals of the KSS.
Methods: A narrative review was conducted. We searched OVID Medline, selected journals, conference abstracts, and library websites for information describing the roles, activities, or service standards related to how libraries support KS. A data-extraction form was iteratively developed and information from each source was extracted: 1) bibliographic 2) service information 3) advocacy information. Qualitative content analysis was used to describe key messaging relating to how libraries support KS.
Results: The results of this review are ongoing and will be presented at the Global Evidence Summit.
Conclusions: Librarians are strategically positioned to improve KS quality, not only by creating reproducible, comprehensive search strategies, but also by raising awareness for reporting guidelines.

2031

Traditional-intensive versus technology-enhanced approach for search and screening in systematic reviews (TITE project)

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Background: The BMJ Rapid Recommendations project aims to rapidly produce evidence summaries and trustworthy clinical practice recommendations within 90 days after identification of potentially practice-changing evidence. The process involves conducting high-quality systematic reviews within 45 days. The TITE project is testing if a technology-enhanced approach can be as much or more accurate and efficient than the traditional-intensive approach.
Objectives: In TITE Q2I (Traditional-intensive versus technology-enhanced / question-to-inclusion time) we will compare both approaches for the process of developing a search strategy, independently screening records and selecting eligible articles in full text.
Methods: The traditional-intensive approach is based on a wide collaborative network of clinicians, patients and methodologists following methods and processes defined in the BMJ Rapid Recommendations protocol. Technology-enhanced approach combines reuse of information from Epistemonikos database, software to facilitate search strategy creation, automated execution and deduplication, a screening platform (Collaboratron TM), machine learning among other technologies. We will select 5 systematic reviews from the BMJ Rapid Recommendations project for which the question-to-inclusion process is already completed. We will set teams of at least two researchers that did not integrate the original review team which will receive the inclusion criteria and a list of electronic databases to be searched. We will measure time, search efficiency and accuracy.
Results: Both traditional-intensive and technology-enhanced approaches have been pilot-tested, but not yet being compared for the same reviews. We will present the results during the Summit.
Conclusions: Finding innovative ways of reducing the burden of the initial steps of systematic reviews are of relevance to the BMJ Rapid Recommendations project, but also to systematic reviewers in general.

2032
Assessing risk of lead-time bias in studies of overdiagnosis

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Background: Overdiagnosis is recognised as a common problem in cancer screening, but estimates of its frequency depend on reliable estimates of lead time. Studies of screening mammography that do not allow for lead time may be biased and overestimate overdiagnosis. The methodology for dealing with lead time is diverse, complex and challenging, especially for non-randomised studies. Currently, there is no agreed systematic method to assess the risk of lead-time bias in studies of overdiagnosis.
Objectives: We aim to describe criteria to assess the risk of lead-time bias in studies that estimate overdiagnosis due to screening mammography for breast cancer.
Methods: Evaluating lead-time bias requires consideration of 3 key elements: estimated mean lead time, the shape of the lead-time distributions and follow-up time after screening stops. We searched for literature around these issues and developed criteria to assess the risk of lead-time bias in studies that estimate overdiagnosis due to screening mammography.
Results: There are 2 study design characteristics that underpin our classification for risk of lead-time bias (Table 1). Where observed data were used to adjust for lead time, the risk of bias is judged on whether there was adequate follow-up to capture the tail of the distributions. Where there was a statistical adjustment, bias is judged on whether there was a sufficient mean lead time (based on directly observed data), or whether the model

estimate of lead time allows for both progressive and non-progressive preclinical cancers and competing mortality (if directly observed data were not used). We judged lead time adjustment based on a comparison of cumulative incidence in a screened and unscreened population with 5+ years of follow-up to be at low or moderate risk of bias. Statistical correction or insufficient follow-up was judged to be at serious or critical risk of bias.
Conclusions: We have developed clear, transparent and mutually exclusive criteria for judging the risk of lead-time bias. These criteria may be applicable to other systematic reviews of cancer screening programmes.

Attachments: Table1_abstract.pdf

2033
Agreement of treatment effects from observational studies using causal modelling and randomised trials: Meta-epidemiological study

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Background: Randomised controlled trials (RCTs) are not available for many important healthcare questions. Observational studies using causal modelling such as marginal structural models (MSM) are increasingly proposed as useful alternative. A recent Cochrane review (1), comparing observational studies with randomised trials, found no empirical analysis of observational studies using causal modelling.
Objectives: To evaluate the agreement of treatment effects estimated by observational studies with causal modelling using MSM with effects of RCTs on the same clinical question.
Methods: In a comprehensive meta-epidemiological study, we included any observational study comparing any defined treatment with any comparator providing an MSM-based effect estimate on any binary outcome. We identified 100 eligible studies via PubMed (last search October 2014), supplemented by screening of citations of key references of causal inference literature. In each eligible MSM-study, we identified any clinical question with a reported MSM-based treatment effect estimate and conducted systematic, peer-reviewed searches on PubMed (last search April 2016), supplemented by citation screenings, for RCT evidence on the same clinical question. Multiple RCTs were combined with random-effects meta-analyses to obtain one summary odds ratio for each clinical question. We then compared the direction of treatment effects, effect sizes and confidence intervals between MSM-studies and RCTs and used the ratio of odds ratios approach to evaluate the overall relationship of causal modelling effects and RCT results. We conducted several sensitivity analyses to explore effect modifications, in particular by risk of bias, mortality/non-mortality outcomes, active/passive comparators, missing data, and research topic.
Results: Results will be available at the time of the Summit.
Conclusions: Results will indicate whether observational studies using causal modelling give different answers than randomised-controlled trials that evaluate the same clinical question. 1. Anglemyer A, et al. Healthcare outcomes assessed with observational study designs compared with those assessed in randomized trials.

2034
Measuring behavioural change outcomes in development aid: A call for standardisation to improve the evidence synthesis

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Background: Handwashing and improved sanitation have been shown to significantly reduce the risk of diarrhoea. Despite this benefit, the intended health impacts of Water, Sanitation and Hygiene (WASH) interventions were generally not attained and the 2015 Millennium Development Goal on sanitation was missed.
Objectives: As part of a Campbell systematic review on the effectiveness of WASH promotion programmes on behaviour change in low- and middle-income countries, we aimed to assess the level of standardisation of WASH behaviour outcomes.
Methods: Via systematic screening of 12 databases/24 websites, studies investigating the effect of WASH promotion programmes on the following behaviour-change outcomes were included: handwashing (at critical times), latrine use, safe faeces disposal and open defecation practices. The level of standardisation was evaluated by the difference in 1) type of data (binary versus continuous data); 2) timing of assessment (uptake (during implementation) versus adherence (within 1 year after end of implementation) versus longer-term use (>1 year after end of implementation); and, 3) study design (experimental versus quasi-experimental/observational studies).
Results: We identified 35 studies (28 experimental studies and 7 quasi-experimental/observational studies) assessing 87 handwashing and 39 sanitation outcomes. When stratifying the outcomes by type of data, timing of assessment and type of study design, it was so diverse that the ability to synthesise outcomes via meta-analyses was rare, complicating proper interpretation of the data. Only handwashing after defecation/before cooking/before eating (Figure 1) and open defecation practices were assessed ≥3 times via a uniform methodology (i.e. collection of binary data during implementation in experimental study designs).
Conclusions: Systematic and uniform definitions and monitoring of standardised WASH behaviour outcomes is needed to improve use of evidence and conduct of evidence synthesis. This would help governments and international bodies to formulate clear and more robust recommendations.

Attachments: Figure 1_final.tif

2035
Using co-design to develop reusable learning apps to promote evidence-based healthcare across borders

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Background: Digital-learning tools such as mobile apps, are increasingly being used at various stages of the evidence-based practice cycle, for example, in evidence generation as study interventions to encourage patient self-management of long-term conditions; in knowledge transfer to support training of healthcare professionals; and, in the translation and dissemination of research evidence. Lack of stakeholder engagement in the design and poor transparency in the development methodology are limitations leading to variable quality. Over a 15-year period, we have developed a repository of open-access, high-quality reusable learning apps (RLOs) developed using an established methodology including stakeholder involvement at all stages, pedagogical design and peer review. Over 200 RLOs are being used globally and in a survey of use carried out in 2013, 13 217 questionnaires were analysed to establish impact and global reach. RLOs covering topics related to evidence-based healthcare

were being used in 40 countries and by various users working in hospitals, universities and schools (Figure 1).
Objectives: 1) To describe the co-design development methodology leading to high-quality RLOs in evidence-based healthcare; 2) to report the findings of an updated and more extensive survey of their global use; and, 3) to make recommendations for the production of high-quality, digital-learning apps for promoting evidence-based healthcare across borders.
Methods: A more extensive and detailed analysis (building on that carried out in 2013) of the global use of the evidence-based health care RLOs is currently under way. The survey, which is optional, is kept short to encourage a high return rate. Closed questions asked about whether the users were students, lecturers, patients/carers; how they found out about the RLO; and, any problems using the RLO. Open questions asked what they most and least liked. Tracking details were also collected. Results/
Conclusions: The results from this large dataset will provide us with important feedback on the value of RLOs on evidence-based healthcare, developed using a co-design process in the UK, to users in other countries.

Attachments: global map.pdf

2036
Handsearching and descriptive analysis of controlled clinical trials published in Geriatrics biomedical journals in Spain and Latin America

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Background: The progressive aging of the world population underscores the importance of research specifically focused on the needs of the elderly. Having access to the available evidence in Geriatrics, specifically controlled clinical trials (CCT), is hampered by the limitations of electronic searches. The implementation of a handsearching approach is therefore an invaluable complement.
Objectives: To identify, describe and evaluate the quality of CCTs published in Geriatrics journals in Spain and Latin America. To submit the corresponding references to CENTRAL.
Methods: Geriatrics journals published in Spain and Latin America in Spanish language were eligible. We handsearched each journal following the Cochrane Collaboration guidelines. We extracted data on characteristics of patients, researched health issues and interventions, main outcomes, and setting, among others. We also assessed the risk of bias associated with this body of evidence.
Results: A total of 17 Geriatric journals, most of them published in Spain and not indexed in the major literature databases, were handsearched from December 2016 until their inception. A total of 75 CCTs were identified and submitted to CENTRAL. We will present the main characteristics of these CCTs and the results of the risk-of-bias assessment at the Summit.
Conclusions: The number of CCTs published in Geriatrics journals in Spain and Latin America is low. In general, the identified studies present a high risk of bias. Most CCTs identified in this project would not have been retrieved using electronic search strategies.

2037
Using the TRANSFER framework for assessing transferability of review findings – a case study

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Background: The TRANSFER Framework aims to support systematic review authors in systematically and transparently considering and assessing the transferability of systematic review findings throughout the systematic-review process. The secondary aim of the tool is to engage decision makers and topical experts early in

the systematic-review process to ensure the review question is precise and useful, and to help identify factors that may influence the transferability of the review findings.
Objectives: We wanted to apply the TRANSFER framework to a commissioned systematic review on the effect of Supported Employment, an employment intervention for unemployed people with various disabilities. Our goal was to be able to assist our commissioners in assessing the transferability of findings in our review of international studies to a Norwegian context.
Methods: We used the TRANSFER framework that consists of 3 parts: (1) guidance for systematic review authors on how to engage with end users in order to identify factors that could affect transferability; (2) a supplementary form to assist review authors in determining what information needs to be extracted from primary studies; and, (3) methods for systematically assessing and transparently reporting assessments of the transferability of review findings.
Results: In collaboration with commissioners, we identified 2 factors that could affect the transferability of the review findings (political/social context and control interventions). We extracted data, conducted analyses and presented our findings and considerations in the report according to the TRANSFER framework. The findings suggested that we had no concerns regarding the transferability to the local context.
Conclusions: The TRANSFER framework assisted in the systematic review process with regard to identifying relevant factors concerning transferability of results, extracting appropriate data and presenting our findings and appraisals in order to guide the commissioners' understanding of transferability of the review findings.

2038
Applying the ROBINS-I tool to controlled before-and-after studies: An example from public health

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Background: The Risk of Bias In Non-Randomised Studies of Interventions (ROBINS-I) tool, and its associated guidance, has a clinical orientation, and does not yet address issues in specific NRS designs such as controlled before- and-after (CBA). Moreover, previous versions of the tool raised issues of applicability. There is a need to test the applicability of ROBINS-I for commonly used study designs, like CBA, and beyond the clinical realm, such as public health, where NRS often represent the best-available evidence. Objective: To establish applicability of ROBINS-I for non-clinical interventions using a CBA design.
Methods: Five researchers, all experienced in critical appraisal of non-randomised studies, used ROBINS-I to assess risk of bias in 5 studies which had evaluated the health impacts of housing improvement; 4 using a CBA, and 1 a before-and-after design. ROBINS-I assessments for each study were entered into a database and checked for consensus across the group. Group discussions were used to identify reasons for lack of consensus for specific questions and bias domains.
Results: ROBINS-I helped to systematically articulate sources of bias in NRS, however, the lack of consensus in assessments across each of the 7 domains questioned its reliability and applicability to studies of natural experiments. The 2 domains with least consensus were: Selection (Domain 2); and Performance (Domain 4). These issues arose due to a lack of clarity for the unit of allocation of the intervention and analysis, as well as uncertainty of the time-point of ascertainment of intervention status which may conceal selection bias. This raised more fundamental difficulties when applying concepts which underpin ROBINS-I. Specifically, the definition of a pragmatic or explanatory trial, and their related Effects of Interest could not be applied to four studies.
Conclusion: Difficulties in applying ROBINS-I may be due to poor design and reporting of controlled before-and-after studies; this may improve in future. In the meantime, improved guidance on applying the tool is needed to allow existing evidence from natural experiments to be assessed appropriately.

2039
Important items at protocol preparation were not reported in the PROSPERO regarding systematic reviews of prediction models

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Background: Systematic reviews (SRs) for prediction models (PM) are important to evaluate their performance across different settings. Several instruction papers regarding methods for them were reported; however, there were no cross-sectional studies of their methods and reporting characteristics. Objective: To describe the methods and reporting characteristics of protocol registered published SRs of PM.
Methods: We screened SRs of prognostic or diagnostic categories with published status in an international prospective register of systematic reviews (PROSPERO) for SRs of PMs indexed until Feb 2017. In addition, we searched for papers citing the CHecklist for critical Appraisal and data extraction for systematic Reviews of prediction Modelling Studies (CHARMS) using the Web of Science. Citations were screened and SRs for prediction models with the PROSPERO registration were retained. We defined PM as a multi-factor model for prediction of individual risk or probability of certain conditions or events. We excluded SRs of prediction studies exploring individual predictors of particular outcomes. This study protocol was registered in the University hospital Medical Information Network Clinical Trials Registry (UMIN000026103).
Results: We identified 1058 published SR protocols in the PROSPERO. Of them, 101 protocols were in prognostic or diagnostic categories. We identified 45 records through the Web of Science citation search. A total of 7 SRs (0.66%) of over 65 000 patients' data were included (Figure 1; Table 1). No Cochrane review was identified. The reporting characteristics were highly variable especially for relevant items of the CHARMS in their protocols. Over half of the reviews did not even pre-specify the outcome to be predicted. Moreover, one study multiplied the outcome at the review phase and did not mention the change in the review. Conclusion: The present study revealed that a limited number of published SRs of PM was registered in the PROSPERO and that their reporting characteristics were various. A guide for the PROSPERO registration of SRs of PM is needed.

Attachments: Table1.pdf, Figure 1.pdf

2040
Using machine learning as a study design filter for systematic reviews of RCTs

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Background: Machine learning (ML) algorithms have proven highly accurate for identifying randomised-controlled trials (RCTs), but string-based study-design filters remain the predominant approach used in practice for systematic reviews and guidelines.
Objectives: We compared the performance of ML models for identifying RCTs against a range of traditional database study-design filters, including the Cochrane Highly Sensitive Search Strategy (HSSS) and the PubMed publication type tag.
Methods: We evaluated Support Vector Machines (SVMs), Convolutional Neural Networks (CNNs), and ensemble approaches. We trained these models on titles and abstracts labelled as part of the Cochrane Crowd project. We evaluated the models on the Clinical Hedges dataset, which comprises 49 028 articles manually labeled (based on full texts).
Results: ML discriminates between RCTs and non-RCTs better than widely used traditional database search filters at all sensitivity levels (see Figure); our best-performing model achieved the best published results to date for ML

in this task (Area under the Receiver Operating Characteristics curve 0.987, 95% CI 0.984 to 0.989). The best performing model (a hybrid SVM model incorporating information from the PT tag) improved specificity compared with the Cochrane HSSS search filter, with identical sensitivity (difference in specificity +10.8%, 95% CI 10.5% to 11.2%), which corresponds to a precision of 21.0% versus 12.5%, and a number "needed to screen" of 4.8 versus 8.0. We have made software implementing these ML approaches freely available under the GPL v3.0 license (at https://github.com/ijmarshall/robotsearch).
Conclusions: ML performs better than traditional database filters, with improved specificity at all sensitivity levels. We recommend that users of the medical literature move toward using ML as the method for study-design filtering.

Attachments: roc-curves.tiff

2041
Synthesising risk from summary evidence across multiple risk factors

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Background: Academic authors typically investigate risk factors in isolation. For example, one meta-analysis might report the increased risk of diabetes among smokers, another among those who are physically active, another among those who drink coffee and so on. Patients often want to know what their overall risk is across all factors, either absolute or compared to the general population. In 2004, Kim et al. validated the Harvard Cancer Risk Index formula where risk factors from summary information of reported results could be combined to provide an overall risk. De Vito et al. recently applied the same formula to coronary heart disease in 2015. The formula as published, is only applicable to dichotomous risk factors.
Objectives: To describe the underlying principles of the Harvard Cancer Risk Index formula, and to derive a general formula that allows for risk factors with any number of levels.
Methods: Mathematical and probability theory.
Results: Using summary data on risk ratios comparing participants with and without a risk factor, along with prevalence of the risk factor in the general population, it is possible to calculate the risk ratio for an individual with a level of a risk factor compared to the risk in the general population. Under an assumption of a multiplicative model without interactions, one can obtain the overall risk ratio for any individuals' pattern of multiple risk factors to the risk in the general population. The absolute risk for the individual can also be obtained if the incidence of the disease in the general population is known.
Conclusions: Although these methods require numerous strong assumptions, they synthesise the evidence into a usable and helpful format that addresses a question many patients ask.

2042
The role of MEDLINE, EMBASE and CENTRAL in systematic literature searches of Cochrane Reviews

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Background: A high-quality systematic review should be based on a comprehensive literature search. The

Methodological Expectations of Cochrane Intervention Reviews stipulate that CENTRAL, MEDLINE and EMBASE need to be searched, regardless of topic. Since literature identification and selection is a very time-consuming part of the review process, having a well-founded understanding of the yield of these databases is important, both when choosing additional information sources and when streamlining the search process for rapid reviews.
Objectives: Our objective is to assess how searches in CENTRAL, MEDLINE and EMBASE lead to included references in Cochrane Reviews. We seek to examine the yield of these databases in systematic searches on a range of topics, and estimate the impact of limiting the number of databases used in rapid reviews. We want to better understand if non-retrieval of studies is due to database choice, limitations of the search strategy, or the type of publication (i.e. grey or published literature) included in the systematic reviews.
Methods: As part of a larger methods project of the Cochrane Rapid Review Methods Group (1), we randomly chose 60 Cochrane Reviews on 5 topics: cardiovascular disease, cerebrovascular disease, osteoarthritis, chronic respiratory conditions, or mental health. For each review, we identified the information sources used in the original searches (e.g. databases, hand search). We checked to see if included references were indexed in CENTRAL, MEDLINE or EMBASE and also assessed the share of grey literature among the references. We re-ran the searches to verify that the indexed references were retrieved by the reported search strategies. We will assessed the database coverage and the recall of the search strategies (per database and cumulatively) for each review individually and based on topic. Results will be available at the Summit.
Conclusions: Will be available at the Summit. (1) Nussbaumer-Streit B, et.al. Assessing the validity of abbreviated literature searches for rapid reviews: protocol of a non-inferiority and meta-epidemiologic study. Sys rev. 2016 Nov 22;5(1):197.

2043
Assessing and validating search strategies: When is a study truly identified?

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Background: Systematic reviews employ comprehensive search strategies to identify all relevant studies on a topic. Methods projects assessing novel search approaches often benchmark the sensitivity of searches by checking whether they find the same studies as comprehensive, systematic searches. However, results of studies are frequently reported in multiple publications. Defining the threshold that classifies a study as 'identified' by a search partially determines the validity of the search strategy under assessment: The least time-intensive approach is to check if the major publication of that study is found. A second approach is to check if any publication of a study was identified. The strictest threshold requires every publication belonging to a study to be found.
Objectives: Our aim is to test the validity of three methods of classifying a study as found by a search compared to a gold standard.
Methods: As part of a larger methods project (1) we randomly chose 60 Cochrane Reviews on various clinical topics. We reproduced their MEDLINE, CENTRAL, and EMBASE searches, and used a 'content-based' approach to determine if a study was found: We read all identified publications belonging to this study and checked if they reported the outcomes relevant for the main meta-analyses. This is our gold standard method: It allows us to define a study as identified when all relevant data are found. For this study we will compare this exhaustive process with the three pragmatic approaches: a study is considered as 'identified' if a) the main study publication is found, b) one publication is found or c) all publications belonging to one study are found. We will assess to what

degree these three methods agree with the results of the content-based approach. Results will be available at the Summit.
Conclusions: To our knowledge, this is the first study to inform methodologists what is the most valid approach to define a study as found by a search strategy. (1) Nussbaumer-Streit B, et.al. Assessing the validity of abbreviated literature searches for rapid reviews: protocol of a non-inferiority and meta-epidemiologic study. Sys rev. 2016 Nov 22;5(1):197.

2044

Evaluating policies and programmes: An exploration of how the choice of non-randomised study design influences results

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Background: For individuals and populations to benefit from policies and programmes implemented in health, education, social welfare, environment or other sectors, it is critical that their effectiveness be rigorously evaluated. As non-randomised studies (NRS) are increasingly applied in evaluations and included in systematic reviews, researchers, systematic reviewers and decision makers need to understand their strengths and limitations. However, the most common NRS included in systematic reviews of effectiveness, controlled before-after (CBA) and interrupted time series (ITS) studies, tend to be inconsistently defined, employed and interpreted.
Objectives: In order to explore how the design and analysis can influence results of primary studies, and in turn potentially results and conclusions of systematic reviews, we conducted a series of re-analyses of a study included in a Cochrane review of interventions to reduce ambient air pollution.
Methods: We obtained the original data of the study 'Mortality Effects of a Copper Smelter Strike and Reduced Ambient Sulfate Particulate Matter Air Pollution' by Pope et al. 2007, which assessed the mortality effects associated with a copper smelter strike in the United States. Based on pre-specified study design definitions and statistical methods, we re-analysed the data as a controlled ITS, an uncontrolled ITS, a CBA and an uncontrolled before-after study. We also assessed how the choice of time period and control group affected results.
Results: Various study design aspects, i.e. inclusion of a control group, choice of control group, adjustment for underlying time trends and variations in the pre- and post-intervention periods, led to differential intervention effects, affecting the magnitude, significance, and in some cases direction.
Conclusions: The primary study design can substantially influence the estimated intervention effect. As NRS designs are applied to evaluate policies and programmes across different sectors, it is key that researchers utilise the most-reliable NRS designs, and that both researchers and reviewers carefully assess the risk of bias associated with the design and other design aspects.

2045

Outcomes relevant for insurance medicine - an evaluation of Cochrane reviews and new initiative

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Background: Cochrane Insurance Medicine (CIM) promotes the use of evidence regarding sick leave certification, disability evaluation, prognosis of claim duration, treatment of disabling conditions, and return to work (RtW) interventions to inform decision-making in a domain of high importance to society. Objective: Using systematic

review methodology, we performed two studies to: evaluate Cochrane reviews on their use of insurance medicine (IM) outcomes, and their characteristics to determine a potential need for a core outcome set on work participation.
Methods: Study 1: We used the Cochrane Priority list and identified reviews with health conditions relevant to IM. We determined prevalence and type of IM outcomes (including distinction between direct outcomes (sick leave, return to work –RtW-, cost) and indirect outcomes (hospitalisation, activity of daily living). Study 2: We searched the Cochrane library and reviewed Cochrane reviews that focused on work participation, both as an outcome and as a target for intervention. We listed and compared characteristics and definitions of work participation outcomes used in these reviews.
Results: Study 1: Although 90% (102/113) of Cochrane reviews covered a health condition with relevance for IM, only 52% (52/102) reviews reported on IM outcomes. Even less (17%, 19/113) reported on direct IM outcomes like RtW. Study 2: RtW and sick leave are frequently measured, using different methods, different follow up times, and heterogeneous definitions. Conclusion: Cochrane reviews frequently lack information on insurance medicine outcomes. Those that include such outcomes lack consensus in their terminology, definitions and use. This finding confirms a need for a clear and universally agreed core outcome set for work participation that is relevant to CIM. Such an outcome set would allow reviewers to systematically compare and pool the results across RCTs and enable trial researchers to include this minimal set of outcomes in future trial protocols, alongside other outcomes. A new project is under way to develop an international core set of outcome measures on work participation relevant to the field of IM.

Attachments: Poster-Oral - Hoving et al - Outcomes relevant for insurance medicine_RWJH_14_03_2017def.pdf

2046
Does the medium matter for educators' understanding of systematic reviews?

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Background: Educators need to understand evidence in order to make informed decisions about what programmes, tools and interventions they will use in their schools and individual classrooms.
Objectives: We wanted to know how well educators are equipped to understand evidence from systematic reviews relevant to their school and/or classroom practice and whether the way in which the information is presented makes a difference.
Methods: Educators including principals, teachers and trainee teachers were randomly presented with one of three summaries of a systematic review on an area of interest to them. The summaries were either a blog, a plain-language summary or the review abstract. Educators then answered questions about their understanding of the review findings and whether the review would influence their practice.
Results: The study is in process.
Conclusions: The study is in process.

2047
Evaluation of the abstract screening tool Rayyan® in the context of the SBU Enquiry Service

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Background: One of the most time-consuming aspects of producing health technology assessment (HTA) reports is the task of identifying relevant studies in a way that minimises the risk of bias. New and emergent technologies are needed to achieve more efficient working processes without the loss of high standards of quality. The SBU

Enquiry Service responds to questions posed by decision makers in healthcare and social services in Sweden, and gives a guide to the scientific literature of the field. Identified studies are not subject to formal quality control or evidence grading. Text mining is a technology that can be used to rank abstracts according to the assessor's perception of relevance. Previous evaluation of Rayyan® has shown that a high number of the abstracts selected for reading in full text were identified early in the screening process.
Objectives: Our objective is to continue to evaluate relevance ranking in the abstract-screening process.
Methods: Rayyan is used by the SBU Enquiry Service for screening of abstracts. After going through 25, 50, 75 and a 100 per cent of references identified in the literature search, the number of potentially relevant abstracts are logged.
Results: So far we have completed evaluations of ten questions to the Enquiry Service. After screening half of the search result at least 88 percent of the relevant abstracts were identified, and for five of the projects all relevant abstracts were identified. After screening three quarters of the search result at least 95 percent of relevant abstracts were identified, and in seven projects all relevant abstracts were identified.
Conclusions:A majority of relevant abstracts are identified early in the screening process when using Rayyan® relevance ranking. It is important to continue to evaluate Rayyan's relevance ranking, to add data from different knowledge fields.

2048
Experiences of the initial stages of developing service-delivery guidance

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Background: A commission was received to develop guidance on the organisation and delivery of diagnostic services across the National Health Service (NHS) in the UK. While well-established methodologies exist for development of clinical guidelines, health-service delivery is a relatively recent area in evidence-based guideline development and methodologies are still in their infancy.
Objectives: The commission was to cover all diagnostic-testing disciplines including endoscopy, imaging, physiology and pathology (including genetics) in all settings where NHS care is commissioned or provided. To inform scope development it was vital for the technical team to gather detailed background information on current service configurations across this extremely broad context. The aim was to identify variations in service provision and quality in order to inform priorities for evidenced-based guidance.
Methods: A mixed-methods approach was taken to gather information from a wide range of stakeholders, including health services commissioners and service organisers, healthcare professionals who carry out, receive or interpret results, and people who need to access services. Information was gathered through a stakeholder workshop, public consultation and a survey on current practice.
Results: Despite using a range of methods to access information, there remained a challenge in painting a comprehensive picture of the existing organisation of services across all diagnostic-testing settings. The majority of information received was disease- or situation-specific and not generalisable across the whole of the UK, or within any one diagnostic discipline.
Conclusions: This work highlighted the need for increased time and resources being available in the early stages of service guidance development. These guidelines require high levels of stakeholder engagement and special consideration should be given as to whether stakeholders are aware of, or can provide, context-specific evidence for service (re)organisation and (re)configuration. Any change from the current system may have a high resource impact and therefore needs to be supported by high-quality, applicable evidence.

2049
Analysing rank statistics: The Cochrane Kit Kat Trial

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Background: We illustrated an approach of teaching randomised-controlled trials through a 'Kit Kat' trial with participants at the 24th Cochrane Colloquium in Seoul, Korea. The trial ran in four cohorts of tasters where three out of four Kit Kats from the United States (US), United Kingdom (UK), France, and South Africa were compared in each cohort. Objective: To illustrate the challenges in analysing and interpreting rank statistics in the context of a network of trials
Methods: We used a crossover design. Each taster tried a piece of three different Kit Kats, wrapped in foil, in a random order. We concealed the random sequence using opaque stickers that were peeled off at time of randomisation. Participants indicated which Kit Kat they liked the 'most', 'second most', and 'least'. This design created a network of four 'nodes' for comparison where the outcome of interest is rank statistics. We summarised the ranks by cohort. We examined whether there is evidence for carry-over effect and cohort effect. We pooled the differences of proportion of each rank in a fixed effect meta-analysis. We also fit Bradley-Terry models to estimate the latent 'likeness' of each Kit Kat by pooling ranks across cohorts while acknowledging the cohort effects. Such latent likeness can be used to rank the preference of Kit Kats, or predict the outcome of a comparison, e.g. probability of one Kit Kat is preferred over another.
Results: 126 conference attendees from 33 different countries participated from 24 - 26 October 2016. We observed a cohort effect, which may explain inconsistent rankings between cohorts (Figure). The pairwise meta-analyses suggest that Kit Kats from France were never 'liked the most' and Kit Kats from the UK were never 'liked the least'. Bradley-Terry model suggested that Kit Kats from South Africa (likeness value= 0.35; the higher the more likable) are liked more than Kit Kats from the UK (0.22), US (0.14), or France (reference= 0) (Table).
Conclusions: Meta-analysis may be an appropriate method to combine rank statistics. The statisticians we consulted also suggested different approaches, which we will present at the Summit.

Attachments: Figure.png, Table.png

2050

Acupuncture for labour pain relief: A systematic review and a network meta-analysis

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Background: Acupuncture is used for labour pain relief frequently, but the evidence is not clear enough.
Objectives: The purpose of this study is to systematically review the literature for randomised-controlled trials of acupuncture therapy for labour pain relief and critically evaluate them. Then a network meta-analysis was conducted to evaluate the effect of acupuncture for labour pain relief.
Methods: Four electronic databases were searched from their inception until June 2016. The inclusion criteria are that they were prospective, randomised-controlled trials. The involved pregnant women at term who received acupuncture alone or as an adjunct to other therapies for pain relief. The primary outcome is pain intensity at one

hour after acupuncture on a 100-mm visual analogue scale (VAS). The secondary outcomes include the duration of labour, caesarean delivery rates, postpartum haemorrhage, Apgar score at 1 minute, and neonatal birth weight.
Results: According to our search strategy, 31 trials with a total of 5809 participants were included. 15 studies are available for network meta-analysis of VAS, while 11 for total duration of labour, 10 for the duration of first stage, 19 for the duration of second stage, 14 for the duration of third stage, 14 for caesarean delivery rates, 12 for postpartum haemorrhage, 11 for Apgar score at 1 minute and 10 for neonatal birth weight.
Conclusions: The effect of acupuncture for labour pain is only better than standard care significantly. It cannot be decided if it is better or worse than other therapies. Further researches may be needed.

2051

Interventions to improve the mental health of children and young people with long-term conditions: Can evidence of effectiveness and evidence of patient experience be mutually informing?

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Background: We have recently completed a project which involved two linked systematic reviews evaluating the effectiveness and experiences of mental health interventions for children and young people with long-term physical conditions.
Objectives: To draw together the findings from two linked systematic reviews of quantitative and qualitative evidence in an overarching synthesis, and describe and reflect on the approach used.
Methods: We used a deductive question and answer approach in which questions based on the findings of each review were generated and used to interrogate the other review for information that could potentially inform the findings or explain gaps in the literature. The process was conducted whilst findings from both reviews were preliminary to allow for the issues raised to also contribute to the synthesis of the individual reviews. Questions were related to either the synthesised review findings or descriptive details regarding included studies.
Results: Nine categories of finding emerged from the analysis – i) the degree of overlap between reviews, ii) availability of up to date, good quality research, iii) what works for whom? iv) adapting interventions, v) accessibility and delivery, vi) stress and coping, vii) working with family or peers, viii) therapeutic relationships and, ix) holistic approach. The findings were presented narratively. Descriptions of the categories, the contribution of each systematic review to the categories and the implications of each category for practice and future research were tabulated.
Conclusions: Despite differences in research questions, methods of synthesis and types of interventions in the two systematic reviews, the novel methods used in this overarching synthesis generated new findings or strengthened evidence. This overarching synthesis led to a number of tentative implications for policy, practice and future research.

2052

Methodological search filters to identify prognosis studies: A systematic review of development and evaluation studies

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Background: Research in prognosis is increasing as its importance is acknowledged in the context of a global rise in chronic health conditions and diseases. As literature on prognosis grows, there is increasing interest in prognostic systematic reviews to collate and synthesise research findings, especially to help inform effective clinical decision making and healthcare policy. A key element of any systematic review is a detailed, comprehensive search strategy. But, this is a challenge for prognosis research due to poor reporting and inconsistent use of existing indexing terms in electronic databases.
Objectives: A systematic review is being conducted to find and compare methodological search filters developed and evaluated to identify any of the 3 main types of prognosis studies: overall prognosis, prognostic factors, and prognostic [risk prediction] models.
Methods: Systematic review of primary studies that report the development and/or evaluation of methodological search filters designed to retrieve prognosis studies. Searches will be conducted of multiple electronic bibliographic databases, grey literature from relevant organisations and websites, contacting experts, citation tracking of key papers and checking reference lists of included papers. One reviewer will screen titles. Two reviewers will independently assess abstracts and full articles for inclusion and also conduct data extraction and quality assessment; any disagreements resolved by discussion or by a third reviewer if required. Filter characteristics and performance metrics reported in the included studies will be extracted and tabulated. To allow comparisons, filters will be grouped according to database, platform, type of prognosis study, and type of filter for which it was intended. Results and Conclusion: Work on this systematic review will begin shortly. Details of all validated prognosis search filters and synthesised evidence on performance and applicability will be presented. These will inform the design of a search filter for different types of prognosis studies, and will support the work of Cochrane prognosis methods group in developing guidance for conducting prognosis reviews.

2053

Use of study design search filters, search strategy quality and reviewers' screening burden in prognosis, diagnosis and effectiveness systematic reviews

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Background: Search filters are used to limit records downloaded from databases to specific study designs when comprehensive searches are conducted. For example, Cochrane Highly Sensitive Search (HSS) filter is recommended for retrieving RCTs in Cochrane SRs. However, filters are not currently advised for prognosis and diagnosis SRs due to lack of precision and potential to miss important studies. Aim: To evaluate and compare search filter use, reviewers' screening burden (Number needed to Read (NNR)) and quality of search strategies in recently published prognosis, diagnosis and effectiveness SRs.
Methods: Purposive sample of 30 freely available, recent SRs (10 effectiveness (3 Cochrane SRs), 10 prognosis, 10 diagnosis reviews) in musculoskeletal diseases selected. Data were extracted on search details, number of records downloaded and studies included in SRs. NNR was calculated for each review. Available search strategies assessed independently by 2 information specialists using Peer Review of Electronic Search Strategies (PRESS).
Results: Overall, 5 diagnostic, 8 prognostic and 5 effectiveness SRs used search terms for study design/type. Cochrane HSS filter was the only published filter referenced in any of the 30 SRs and was used in 2 of the effectiveness SRs (both Cochrane SRs). NRR ranged from 4 to 1291 depending on comprehensiveness of search strategies, but did not appear to vary according to type of SR. However, this was difficult to judge as topic areas varied considerably. Quality of search strategies using PRESS checklist, and impact on NNRs, will be discussed during the conference.
Conclusions: Despite advice not to use filters for diagnostic and prognostic SRs, reviewers continue to restrict SR searches by using study design specific terms, but not use specifically designed published filters. In effectiveness SRs, where efficient RCT filters exist and are recommended, many reviewers are not using them. This highlights the need for designing and evaluating high-quality search filters in several areas, and better implementation of the established Cochrane RCT search filters, in order to improve the efficiency and quality of systematic reviews.

2054

Design characteristics influencing performance of prognostic models upon external validation: A meta-epidemiological study

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Background: Meta-epidemiological studies have shown that the design of a randomised trial or diagnostic accuracy study influences the study results and can be a source of bias. Evidence for the influence of study-design characteristics on the findings of prognostic-prediction modelling studies is, however, lacking.
Objectives: To determine the influence of design characteristics of external validation studies on the performance (discrimination and calibration) of prognostic models.
Methods: We searched electronic databases for systematic reviews of prognostic models published between 2010 and 2016. Reviews from non-overlapping clinical fields were selected if they reported performance measures (concordance (c)-statistic or ratio of observed over expected number of events (OE ratio)) from 10 or more validations of the same prognostic model. From the included primary external validation studies we extracted information on design characteristics, including but not limited to the study design, study dates, methods of predictor and outcome assessment, and the handling of missing data. Measures of model performance (c-statistic and OE ratio) were extracted from systematic reviews and primary studies. Random effects meta-regression was used to quantify the effect of these characteristics on model performance.
Results: We identified 50 systematic reviews of prediction models, of which 11 were included, resulting in a total of 353 external validation studies, of which >300 reported model performance. Preliminary analyses of models predicting cardiovascular disease in the general population revealed mixed trends towards better c-statistics and worse OE ratios in validation studies with more flawed designs. At the Summit, we will present which design characteristics tend to influence model performance for all 11 clinical fields.
Conclusions: Our results will provide empirical evidence of the importance of design features in external validation studies of prognostic models.

2055

EBM+: evidence of mechanisms in evidence-based medicine

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Background. In the evidence evaluation process, evidence-based medicine tends to focus on clinical studies. Evidence of the mechanisms responsible for effectiveness which is produced by other means (e.g. in vitro laboratory research, biomedical imaging, simulation) tends to be treated implicitly by those charged with evaluating evidence, such as committees for approving drugs or public health actions. This goes against the tenets of evidence-based medicine: relevant evidence needs to be made explicit, in order that its quality can be scrutinised and, if need be, its conclusions challenged. Objectives. This paper sets out a strategy for scrutinising evidence of mechanisms in medicine, developed by the EBM+ project (ebmplus.org). Methods. This is a philosophical project supported by the UK Arts and Humanities Research Council. A team of researchers at the Universities of Kent, UCL, Amsterdam and Cambridge, together with practitioners at NICE and IARC, have developed a methodology for scrutinising evidence of mechanisms and using this evidence to help evaluate effectiveness in medicine. This methodology is in line with current philosophical work on mechanism discovery and quality of evidence. Results. The resulting methodology tackles 2 questions: establishing efficacy and establishing external validity. In the first, scoping phase, a mechanism hypothesis is formulated and evidence of mechanisms is identified in the literature. Next, the evidence of mechanisms is evaluated by means of key quality

indicators, to determine the status of the mechanistic hypothesis. Finally, this evidence evaluation is combined by the evaluation of the clinical studies (using, e.g. GRADE methods) in order to determine an overall evaluation of efficacy or external validity. Conclusions. Although evidence of mechanisms is heterogeneous, involving sources other than clinical studies, we demonstrate that it is possible and practical to scrutinise and evaluate this evidence in line with the principles of evidence-based medicine.

2056

Extending ROBINS-I for assessment of studies reporting instrumental variable analyses

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Background: Systematic reviews should assess risk of bias in included studies, in order to draw conclusions about the strength of the evidence for causal effects of interventions on health outcomes. The ROBINS-I (Risk Of Bias In Non-randomised Studies - of Interventions) tool provides a structured approach to assessing risk of bias in non-randomised studies of interventions (NRSI) based on comparisons with a hypothetical high-quality pragmatic randomised trial. Answers to signalling questions lead to judgements of risk of bias within bias domains and overall. The published tool and guidance mainly focus on studies with a cohort-type design. Instrumental variable (IV) analyses, which can estimate causal effects of interventions in the presence of unmeasured confounding of the intervention-outcome association but require other assumptions, are not currently addressed.
Objectives: Adapt the ROBINS-I tool, including its signalling questions and accompanying guidance, to assess risk of bias in studies reporting IV analyses.
Methods: An international working group of experts in IV methodology met via teleconferences and face-to-face. The group agreed changes to the ROBINS-I tool through consensus.
Results: We added two new bias domains to ROBINS-I. The first (replacing the ROBINS-I confounding domain) assesses the core IV assumptions that 1) the IV is associated with the intervention; 2) there is no residual confounding of the IV-outcome association; and, 3) the effect of the IV on the outcome is via the intervention. The second assesses the plausibility of the additional 'point identifying' assumptions required for the validity of different types of IV estimate. In addition we adapted signalling questions within existing ROBINS-I bias domains, such as the 'deviations from intended intervention' domain.
Conclusions: The extended ROBINS-I tool contains signalling questions and guidance to assess risk of bias in studies reporting IV analyses. These will now be piloted, with feedback used to inform further modifications.

2057

Should all inclusion criteria be used for inclusion?

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Background: Cochrane reviews state that there are four (PICO) criteria for inclusion of studies but the guidance is usually not to use the outcomes (O) for inclusion of studies to prevent outcome reporting bias.
Objectives: To survey how outcomes in recent Cochrane Reviews were defined and used for inclusion of studies

and how current practice compares with existing guidance on preventing outcome reporting bias.
Methods: We performed a survey of the latest systematic reviews published by each Cochrane review group as of August 2016. We extracted data on the names and number of outcomes and which were used in summary of findings (SoF) tables and abstract, and recorded if and how the outcomes were used for inclusion of studies in the review. We compared this with guidance documents.
Results: We included 52 reviews with a mean of 8.4 (SD 4.3) outcomes. All but two reviews contained SoF tables. Of all reviews 47 (90%) used primary and secondary outcomes as the names for their review's outcomes, but without further definition. None reported using a core outcome set. Forty reviews (77%) did not explain if and how they used the outcomes for inclusion of studies, 8 (15%) stated that studies were included if they reported either primary or secondary outcomes, 1 (2%) reported that outcomes were not used for inclusion and for 3 (6%) it was unclear how outcomes were used. In 15 (29%) reviews, the outcomes were used for inclusion because the type of participants/patients did not sufficiently define the outcome such as when the intervention is preventive. In 8 (17%) reviews, secondary outcomes were not reported in SoF table or in the abstract.
Conclusions: In a sample of recent Cochrane Reviews, it remained unclear if and how outcomes were used for inclusion of studies and for reporting in the SoF tables in most reviews. Better explanation of inclusion decisions at review level is needed to be able to understand the risk of outcome reporting bias in a review. Consistent guidance in names and definitions for different types of outcomes used in systematic reviews is needed.

2058
Drawing conclusions from network meta-analysis

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Background: Systematic reviewers having conducted a network meta-analysis (NMA) face a daunting task of succinctly and judiciously drawing conclusions from evidence that includes estimates of the relative effectiveness of all possible pairwise comparisons (with point estimates and confidence or credible intervals), an assessment of the certainty of each of these estimates (also known as quality of the evidence), and rankings. To date, guidance on how to combine all this information to draw appropriate conclusions about the relative merit of the management options under consideration remains limited.
Objectives: To present an initial approach to draw conclusions from NMA, combining the estimates of effect, rankings, and certainty in the evidence.
Methods: The GRADE project group on NMA is developing an approach to integrate all the information to draw conclusions from NMA. Brainstorming sessions will be followed by the presentation of the approach to other experts during research meetings. The feedback from these experts will be incorporated and the approach will modify and tested in other examples. We will repeat these steps as many times as necessary.
Results: Conclusions thus far include the need to assess rankings in the context of certainty of the evidence. In particular, high ranking of a particular treatment may be misleading if the contributing evidence is of low or very low certainty. We will present further insights regarding how to draw conclusions from NMA, and will discuss the strengths and limitations of our approach. We will provide guidance on how to draw conclusions from NMA, and to get feedback on our work.
Conclusions: Making appropriate conclusions from NMA requires considering all the pieces of information. Guidance on how to combine the effects estimates, ratings of certainty of the evidence, and rankings, is crucial.

2060
Are there differences in results between Bayesian and Frequentist network meta-analyses

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Background: Frequentist statistical methods rely on traditional notions of statistical significance. It is easy to include and assess the effect of the study design by adding this extra level to the hierarchy of the data structure. Nowadays, Bayesian statistical methods are increasingly popular as a tool for meta-analysis of clinical trial data involving both direct and indirect treatment comparisons. However, appropriate selection of prior distributions for unknown model parameters and checking of consistency assumptions required for feasible modeling remain particularly challenging. Besides, the consistency in network meta-analysis between
Bayesian and Frequentist analysis method are unclear, there are very few papers that explicitly discuss and compare the underlying consistency of these two methods.
Objectives: The objective of this presentation is to review the differences and consistency in the network meta-analysis between Bayesian and Frequentist analysis method.
Methods: A comprehensive literature search in the Cochrane Library, PubMed, EMBASE, Chinese Biomedical Database (CBM), China National Knowledge Infrastructure (CNKI), and the Wanfang Database was conducted from inception to February, 2017. We included the network meta-analysis of randomised-controlled trials that provided sufficient data for both Bayesian and Frequentist analysis method. We calculated the inconsistency, defined as the difference in log odds ratios between Bayesian and Frequentist analysis method estimates, together with its standard error, and tested whether the inconsistency was statistically significant. The inconsistency between Bayesian and Frequentist analysis method estimates can also be expressed as a ratio of odds ratios by an anti-log transformation. We calculated the proportion of trial networks with a statistically significant inconsistency ($P<0.05$) between the Bayesian and Frequentist analysis method comparisons. The pre-specified subgroup analysis was also undertaken to investigate the association of a significant inconsistency. Results and
Conclusions: This study is ongoing and results will be presented at the Summit as available.

Attachments: Are there differences of results between Bayesian and Frequentist network meta-analyse..pdf

2061
Overview of systematic reviews of single-agent treatment based on DPP-4 inhibitors for type-2 diabetes

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Background: Nowadays, There are more and more systematic reviews/meta- analyses published to report the efficiency of dipeptidyl peptidase-4 inhibitors (DPP4-I) for the treatment of type-2 diabetes mellitus (T2DM), but the the reporting and methodological quality varies.
Objectives: To evaluate the reporting and methodological quality of systematic reviews/meta-analyses (SRs/MAs), and summarise evidence of dipeptidyl peptidase-4 inhibitors (DPP4-I) for the treatment of type-2 diabetes mellitus (T2DM).
Methods: We included SRs/MAs of randomised-controlled trials (RCTs) of DPP4-I for the treatment of T2DM until July 2016 by searching the Cochrane Library, PubMed, EMBASE and three Chinese databases. Two authors independently selected studies, extracted data, and evaluated the reporting and methodological qualities and the quality of evidence using the PRISMA checklist, the AMSTAR tool and the GRADE approach.
Results: Twenty-eight SRs/MAs involving a total of 292 573 participants of DPP4-I for the treatment of T2DM were included in this overview. The reporting and methodological quality of the included SRs was not high, and there

are common areas for improvement. The evidence showed that DPP4-I have a more favorable effect than placebo in improving the HOMA-β and reducing the levels of HbA1c, FPG and DPP4-I were not associated with any increased risk of adverse reactions. However, DPP4-I were inferior to sulfonylureas, GLP-1 receptor agonists and placebo in reducing body weight.
Conclusions: SRs/MAs of variable quality showed the potential benefits of DPP4-I for the treatment of T2DM patients; however, higher quality studies employing checklists in the assessment of reporting and methodological qualities are required to validate this evidence.

Attachments: Overview of systematic reviews of single agent treatment based on DPP-4 inhibitors for type 2 diabetes.pdf

2062
Improving the precision of search strategies for guideline surveillance

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Background: An analysis of searches conducted for the NICE guideline surveillance programme indicated that only about 3% of studies are included following sifting. Currently, population only searches are used with the aim of retrieving all relevant articles. This can result in a high number of results with low precision. Although machine-learning techniques may offer a mechanism for improving precision of surveillance searches in the future, they are not commonplace currently. An alternative approach involves utilising search techniques to increase the precision of the searches used for surveillance, without losing the recall of the search.
Objectives: To conduct a retrospective analysis comparing the impact of a modified search approach on the surveillance decision.
Methods: Five guidelines were selected for inclusion in this retrospective analysis using the following criteria: • Surveillance decision was to update the guideline • Large database of results from the search strategy (>3000 studies) • Low number of included studies summarised (<5%) The searches for those topics were re-run using additional search techniques including: • Major/focused subject headings • Frequency operators • Subheadings • Truncation amendments • Methodological filters with higher precision
Results: The impact of the modified search approach will be compared with the original search approach employed and the following factors considered: • Impact on number of results • Impact on identification of key papers • Impact on surveillance decision
Conclusions: The implications of using additional search techniques in guideline surveillance will be discussed with a particular focus on which techniques optimise the balance between precision and sensitivity, with the least impact on surveillance decisions.

2063
Major and rapid methodological changes: Lessons learned in evidence synthesis and its application in guideline development

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Background: In recent decades there have been important and rapid changes in how evidence is identified, assessed and synthesised and also in methods of guideline development. The National Institute for Health and Care Excellence has developed guidelines for more than 15 years in the UK and demonstrated the importance of timely response to methodological developments in order to ensure robustness of its guideline

recommendations. Developments are identified through current awareness and collaboration with various international organisations, especially Cochrane, GRADE and G-I-N.
Objectives: To share our experience of introducing new methods in systematic reviews and guidelines.
Methods: An evaluation of more than 15 years' experience in evidence synthesis and guideline development, focusing on shared learning as methodologists and developers. Horizon scanning can help monitor and assess the potential for these.
Results: New evidence synthesis methods are continually being developed in research and guideline developers need to be aware of these and be able to adapt and introduce new ways of working as appropriate. We present two detailed case studies. GRADE: Practical aspects of introducing change in established work programmes: how methodological change can be introduced to improve the quality of guidelines without impacting on outputs. Problems included shifting from study-based to outcome based appraisal, defining outcomes and MIDs, tackling imprecision, differences between Cochrane reviews and guidelines, strong' and 'weak' recommendations. Network meta-analysis: Methodological aspects of introducing new analytical approaches in systematic reviews: when they are appropriate, quality assessment including application of GRADE, examining outputs for believability relative to expectations.
Conclusions: The scale and pace of methodological development has increased over time. Systematic reviewers and guideline developers need to be able to identify these in a timely way and adapt methods as appropriate. When introducing change it is important to learn from other settings and organisations as well as sharing experiences and learning with others.

2064

Best-practice recommendations for using clinical trial registry records and published study protocols when conducting systematic reviews of interventions

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Background: Searching for clinical trial registry records and published study protocols (hereafter 'protocols') is mandatory according to most systematic review conduct and reporting guidelines. Additionally, the new Cochrane risk-of-bias tool recommends use of a protocol to evaluate reporting biases. However, there is no comprehensive guidance about how protocols should be used in systematic reviews. We have evaluated how protocols are used in a sample of Cochrane reviews(a), and we recognise some important challenges.
Objectives: The aim of this study is to: 1) synthesise the literature on using protocols when conducting systematic reviews of interventions; and, 2) formulate 'good-practice' recommendations to guide authors towards a more methodical use of protocols in systematic reviews.
Methods:A systematic search for published and unpublished literature describing procedures for using protocols in evidence synthesis will be conducted in bibliographic databases (Medline, EMBASE and CINAHL) and the websites of key systematic review collaborations (JBI, Cochrane, Campbell). The literature review findings, combined with previous work by this team (1), will be integrated develop 'good-practice' examples as concrete illustrations of those procedures for each step (as described in the Cochrane Handbook) of a systematic review.
Results: The results of this study are expected by August 2017.
Conclusions: We will provide practical examples of using protocols through all stages of a systematic review. This will help reviewers to know how to include protocols, particularly for evaluating and minimising bias, and to facilitate transparent reporting. We are aware that there are many forms of evidence synthesis (systematic reviews, rapid reviews, diagnostic review, overviews of reviews). Some, but not all, of the suggested examples may be applicable to other types of synthesis reviews. 1. Boden, Bidonde, Busch & Meneses (2016) Utilization of trial registry records and randomized controlled trial study protocols in Cochrane systematic reviews of interventions: a content analysis. 24th Cochrane Colloquium, Seoul, Korea, October 23-27, 2016

2065

What is the evidence for collaborative approaches between service users and community mental health nurses to identify and support survivors of Domestic Violence and Abuse (DVA) using a rapid review approach?

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Background: DVA is known to have a causal affect to a range of mental health conditions including self-harm (Boyle et al., 2006), eating disorders (Bundock et al., 2013) and psychosis (Howard et al., 2010). Recent work undertaken by Oram, et al., (2013) reports prevalence rates of lifetime intimate partner violence (IPV) as 29.8% for female inpatients and 33% for outpatients accessing community services and clinics. Similar prevalence rates exist for male patients accessing services. The prevalence rates would indicate that community psychiatric staff are likely to see patients who are survivors of DVA.
Objectives: A recent meta-synthesis (Trevillion et al., 2014) reported that there is a paucity of evidence on how psychiatric services respond to service users' experiences of DVA. However, whilst this meta-synthesis suggests a need for healthcare professionals to reflect on their continual professional development (CPD) what evidence exists for collaborative approaches, between DVA service users and community psychiatric nurses.
Methods: It is proposed to conduct rapid literature review during 2016. In comparison to a systematic literature review, 'rapid reviews' provide the option of a more simplified approach in its methodology and may be more timely for meeting pump priming or feasibility study requirements (Khangura et al., 2012). Rapid reviews often employ a narrower search, using one or two databases and are limited in the number of staff involved.
Results: How results from a rapid review compares to a formalised systematic literature review.
Conclusions: The rapid-review technique appears to suggest there is scant evidence in relation to collaborative approaches identified to support and manage DVA in community mental health systems. It suggests that further collaborative research be explored for CPD opportunities for psychiatric nurses in different mental health settings so that they are to fully able support their patients.

Attachments: DVA and CMHT.pdf

2066

The reporting guideline for an acupuncture systematic review

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Background: The number of acupuncture systematic reviews/ meta-analysis(SR/MAs) is increasing rapidly, whereas the reporting quality of SR/MAs is poor and we need reporting criteria to improve this situation.
Objectives: To develop an extension of PRISMA statement for acupuncture to improve the reporting quality of acupuncture SR/MAs.
Methods: We applied a 4-step method including: 1) assess acupuncture SR/MAs and relevant reporting guidelines; 2) investigate the information need from the perspectives of clinicians, researchers, masters and doctors; 3) employ a 3-round Delphi process to select items; and, 4) conduct a face-to-face meeting.
Results: Seven initial items were collected. 269 respondents were surveyed and 251(93%) with complete data were analysed at the second step, which showed a low satisfaction with the reporting quality of acupuncture SR/MAs. Ten items from previous steps were circulated to Delphi process, where 34 experts were invited and 29

agreed to participate. Fifteen items were included after the 3-round Delphi survey. On 12th October 2016, thirteen experts were invited to participate the face-to-face meeting, of whom all commented and approved the 15 extended items. We have finished all the work in December 2016, and formed a checklist with 15 extended items tailored for the acupuncture SR/MAs.
Conclusions: We combined the survey of evidence users, review of current acupuncture SR/MAs, the 3-round Delphi process and the face-to-face meeting to ensure the comprehensiveness, reliability, and practicability of the reporting critiria.

2067

Agreement between data-based and opinion-based predictions of biases affecting randomised trials within systematic reviews

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Background: Trials within meta-analyses are often affected by varying amounts of internal bias caused by methodological flaws. By using external information on the likely effects of particular biases, trial results can be adjusted. Two proposed methods adjust trial results based on: (1) empirical evidence from published meta-analyses; or (2) expert opinion elicited specifically for each trial in the meta-analysis.
Objectives: Our aim is to investigate agreement between empirical data-based and opinion-based approaches to predicting the bias associated with flaws in each of four trial characteristics: sequence generation, allocation concealment, blinding and incomplete outcome data.
Methods: For each bias component in turn, we sampled 30 meta-analyses from a large collection of meta-analyses, the Risk of Bias in Evidence Synthesis (ROBES) study. A bias model was fitted to all meta-analyses within ROBES to obtain fitted values for the trial-specific biases within each sampled meta-analysis. We selected the pair of trials with the highest and lowest fitted bias values within each meta-analysis, and then asked assessors which trial within each pair was judged to be more biased on the basis of detailed trial design summaries.
Results: Assessors chose trial pairs to be equally biased in 68% of trial rankings. Of the assessor opinions that judged one trial as more biased, the proportion that agreed with the ranking based on data-based fitted biases was highest for allocation concealment (79%) and blinding (79%) and lower for sequence generation (59%) and incomplete outcome data (56%).
Conclusions: We expect that incorporating opinion on bias may not reduce uncertainty much, compared with using data-based evidence alone, given that experts chose 'equally biased' for the majority of trial rankings. However, combining data-based evidence on bias with opinion would be useful when data-based evidence is sparse.

2068

How pervasive are unit of analysis errors in cluster randomised trials: A review of diabetes quality improvement RCTs?

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Background: Cluster randomised trials (cRCTs) can lead to spurious conclusions if clustering is not taken into account during analysis. The inclusion of cRCTs with uncorrected unit of analysis errors in systematic reviews (SR) may lead to incorrect review conclusions.
Objectives: To determine the proportion of cRCTs that have unit of analysis errors (and whether they provide data

to correct for errors) in a SR of diabetes quality improvement (QI) strategies.
Methods: Two researchers independently reviewed the 55 cRCTs to determine whether appropriate methods were used to adjust for clustering for the primary outcome: continuous HbA1c. If appropriate, we extracted the method of adjustment and the adjusted standard error (SE) (or reported data to calculate the adjusted SE), and the intraclass correlation coefficient (ICC). The total number of studies with persistent unit analysis errors requiring reviewer adjustment was determined.
Results: Of the 55 cRCTs, 37 (68%) accounted for clustering. Studies varied in the methods used to adjust for clustering (e.g. generalised estimating equations, mixed- effects regression) and over half (20/37) adjusted for additional covariates. Of the appropriately adjusted cRCTs, 2 studies reported SEs that could be directly extracted and 26 reported enough information (e.g., mean difference, p-values, confidence intervals, cluster number) from which an adjusted SE could be calculated. Eleven appropriately adjusted cRCTs did not report an adjusted SE or provide enough information from which one could be calculated. Ten studies (18%) reported ICCs for the HbA1c outcome, which ranged in value from -0.002 to 0.1. Combined with the 19 studies that did not account for clustering, 29 (52%) of studies required adjustment of their SEs with an internal (n=1) or externally-imputed (n=28) ICC.
Conclusions: Cluster RCTs pose important methodological challenges for SRs. Reviewers need to be aware of potential unit of analysis errors and adjust estimates accordingly. The presentation will outline our approach to identifying, and adjusting for, unit of analysis errors in our diabetes quality improvement SR.

2069

Evidence syntheses incorporating adverse effects and risks compared to benefits of treatment - a key element of balanced systematic reviews

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Background: Systematic reviews should compare risks and harms to benefits to optimise their usefulness in supporting guideline development. As an example, prescription opioids have become the leading cause of injury deaths and considerable morbidity in the US because harms were not considered. Guideline recommendations and informed consent discussions will be hampered if there is lack of synthesised data to support risk vs. benefit discussions.
Objectives: 1) To review and compare extant systematic reviews' consideration of the adverse personal and population effects of acute and chronic opioids compared to consideration of benefits. 2) To guide SR development so that SRs facilitate informed recommendation development, considering risks vs. benefits
Methods: We reviewed existing SRs in the Cochrane Library and several other SRs to determine the extent and methods of adverse effects review compared to review of benefits, and used the Cochrane Adverse Effects Review methodology as a standard.
Results: Most systematic reviews supporting pain treatment guidelines consider only some adverse effects (or none in some cases), some types of patients, and some classes of evidence, with little synthesis. Population effects are generally ignored. As a result, it is likely that some guidelines and physician surveys still advocate more widespread use of opioids for chronic non-cancer pain, particularly in the elderly, who are at higher risk. Opioids affect most organ systems, with risk related to dose, age, gender, co-morbidity, and concurrent use of multiple opioids and sedative/hypnotic and psychiatric medication. Review of observational studies is an important part of adverse effects review as an element of comprehensive systematic reviews, or as a companion document to effectiveness reviews.
Conclusions: Systematic reviews should explicitly consider the many effects of opioid use on personal and public safety, quality of life, function and avoidable adverse health effects. Guideline developers, and all other stakeholders, need full information about benefits, risks, and adverse effects and risks to inform recommendation development and decision making.

2070

Identifying and dealing with participants with missing outcome data in trials: Framework for systematic review authors

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Background: For dealing with trial participants with missing outcome data (MPD) in systematic reviews (SRs), the GRADE working group recommends conducting a complete case analysis (CCA) for the primary analysis. The group also recommends conducting sensitivity analyses making assumptions about the outcomes of those participants to evaluate the robustness of results. However, it is not always clear from trial reports whether some categories of participants (e.g., non-compliers) were followed-up or not (i.e. have MPD or not). Also, it is not always clear how the trialists dealt with MPD in their own analysis. Currently, there is no guidance on how SR authors should deal with these situations.
Objectives: To provide SR authors with a framework to identify and deal with the categories of participants for whom it is not clear whether they were followed-up for the outcomes of interest and make suggestions on how to deal with these categories in their primary analysis and sensitivity analysis.
Methods: Our group conducted a number of methodological studies on the topic of interest. We then convened a group of researchers with expertise in SR methodology and MPD. The group drafted an illustration of the status of trial participants and their outcome data at the trial and SR level. We refined this illustration and developed into a framework that provides better guidance for SR authors.
Results: We are still in the process of finalising the framework. In general, when trialists are clear about whether certain categories have MPD, we recommend that authors of systematic reviews exclude these categories from the primary meta-analysis (CCA) and include them in the sensitivity analysis. When trialists made assumptions, or excluded them from the analysis, these categories should be considered as having MPD. When trialists are not clear whether certain categories have MPD, we recommend that authors of SRs consider that the categories of participants listed in table 1 have MPD. Conclusion: Our framework will assist SR authors to identify participants with MPD and deal with them in their meta-analysis.

Attachments: table 1.PNG

2071

User engagement in evidence synthesis: A comparative analysis of African labour, housing and conservation policies

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Background: The synthesised results of research evidence can inform decision making at a practice and policy level. However, for such evidence synthesis to be considered during decision making, it needs to be accessible to decision makers and be relevant to their needs. User engagement in the process of conducting evidence syntheses is positioned to serve as but one tool that can increase the use of syntheses.
Objectives: This study compares the results of 3 different approaches to user engagement applied in recent evidence syntheses produced in collaboration between African decision makers in labour, housing and conservation policy contexts and researchers at an academic institution.
Methods: We conduct a comparative analysis of 3 different case studies of user engagement in evidence

synthesis. We compare cases across a range of variables including: method of engagement; type of synthesis; adaptation of research process; policy narrative; and, observed use of the syntheses.
Results: Three cases of evidence synthesis user engagement are presented: (1) a supply-led systematic review of labour market participation interventions using evidence mapping and visualisation as engagement tools; (2) a series of 4 demand-led rapid evidence assessments of conservation interventions using evidence mapping, co-production, and joint workshops as engagement tools; and, (3) a demand-led evidence map of human settlements research produced in-house by a government department involving researchers as stakeholders. Mid-term results indicate that user engagement is an effective tool to enhance the policy relevance of evidence synthesis increasing the likelihood that synthesis results are considered during decision making. A strong policy narrative of how the synthesis can inform decision making and a high level of agency of decision makers supports use. Evidence mapping serves as an effective engagement tool at the beginning of the synthesis project. Methods of evidence synthesis require adaption the higher the degree of user engagement in the synthesis process.

2072
Making a Chinese practice guideline of assisted reproductive technology (ART) for infertile women with advanced age

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Background: More women postpone childbearing nowadays while female fertility begins to decline with advancing age. Furthermore, with the rolling out of the two-child policy, there is a huge demand for a second child for Chinese aged women. There are various assisted reproductive technology (ART) strategies applied for age-related infertility without sufficient evidence.
Objectives: On behalf of the Society of Reproductive Medicine, Chinese Medical Association, we would like to develop a Chinese guideline of ART strategies for age-related infertility.
Methods: This guideline will be produced following the recommendations for standard guidelines described in the 2012 WHO Handbook for guideline development. The Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework will be followed. A protocol was formulated and a Guideline Development Group was formed in Oct 2016 with specialists of reproductive medicine, methodologists from Chinese GRADE working group and aged infertile women. During Nov and Dec 2016, questions regarding the ART strategies for aged infertility were formulated and the 12 most important ones were chosen to be structured in PICO format (Population, Intervention, Comparison, Outcomes). Comprehensive search and review of the literature will be performed since Feb 2017. The quality of the evidence will be assessed and rated based on certain criteria and be categorised as high, moderate, low or very low, and decision-making tables will be generated and reviewed. Recommendations will be then formulated among members of the Guidelines Development Group (Delphi method) basing on the overall quality of the evidence, in addition to the balance between benefits and harms, values and preferences, and resource implications. The strength of recommendations will be rated as either strong or conditional. The final recommendations will be agreed on by consensus during a face-to-face meeting in Jul 2017 and then sent to external auditors.
Results: The guideline is scheduled to be published in Sep 2017. Conclusion: This will be the first practice guideline in reproductive medicine developed following a standard scientific method.

Attachments: flow chart of the guideline developing process.pdf

2073
The formulation of clinical questions for a Chinese practice guideline of assisted reproductive technology (ART) strategies for age-related infertility

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Background: More women postpone childbearing nowadays while female fertility begins to decline with advancing age. Furthermore, with the rolling out of the two-child policy, there is a huge demand for a second child for Chinese aged women. There are various assisted reproductive technology (ART) strategies applied for age-related infertility without sufficient evidence. The Society of Reproductive Medicine, Chinese Medical Association is going to develop a Chinese practice guideline of ART strategies for age-related infertility.
Objectives: We would like to formulate the most high-profile clinical questions in reproductive medicine which will be answered in this guideline.
Methods: We performed two rounds of questionnaire-investigation. An open-ended questionnaire was firstly distributed to the members of the Guideline Development Group, including specialists in reproductive medicine, methodologists from Chinese GRADE working group and aged infertile women. Based on the results, we develop a scale questionnaire regarding the importance of the addressed clinical questions and administrated it to reproductive medicine physicians throughout China in Dec 2016. Quantitative scores were assigned to every question based on the proportion of each options and a ranking of the clinical questions were then made.
Results: In the first-round survey, eleven experts from Beijing, Shanghai and seven other provinces (male 18.18%, female 81.82%) came up with 78 clinical questions which they believed to be of the biggest concerns regarding ART strategies for age-related infertility. After deduplication and combination, we obtained 36 questions while 21 of them qualified for the second-round survey. At the end of Dec 2016, we received 336 copies of questionnaire from all over mainland China, covering all the 32 provinces (municipalities and autonomous regions). Two of the questionnaires were duplicated and 1 was blank (excluded), and 333 were included in the next-step analysis. 90.4% of the respondents are female, 82.3% with graduate degrees. Twelve most important clinical questions are included in this practice guideline and will be further refined and structured.

Attachments: 19 clinical questions formulated.pdf

2074
Methods of identifying and displaying gaps in health research

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Background/
Objectives: The term 'research gap' is not well defined and its meaning can differ according to the research context. In health research, a research gap generally refers to a clinical question for which missing or insufficient information limits the ability to reach a conclusion. It is also referred to as research uncertainties and is closely linked to research needs, priorities and evidence-based research. Identification of research gaps has the potential to inform the design and conduct of research, evidence-based decision-making, health policies, and practice. Audiences including consumers, patients, researchers, clinicians, advocacy groups, and funders can also benefit from understanding the current status of research gaps. This study aims to better define and describe the different types of research gaps and methods for identifying and displaying them in health research.
Methods: We conducted a scoping review and searched PubMed, TRIP, and Google Scholar for relevant articles by using the following combination of terms: 'identifying gaps in research' OR 'research gaps' OR 'evidence gaps' OR 'research uncertainties' OR 'research gaps identification' OR 'research gaps prioritisation' AND 'methods'. The searches were limited to English language studies conducted in humans and published in the last 10 years. The search was enriched by expert recommendations and hand searching based on highly relevant articles. A total of 2080 articles were identified for abstract screening. Preliminary results & conclusion: Full-text screening is ongoing and results of the scoping review will be available for the conference. This project will provide an

overview of different methods reported on identifying and displaying gaps in health research and propose methodological recommendations including classifications of gaps and methods of identifying gaps which can improve research, research prioritisation and evidence-based decision making.

Attachments: NyanchokaL- Scoping Review Global Evidence Summit final draft.pdf

2075

Approaches to the identification, synthesis and appraisal of frameworks, models and theories: A methodology review

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Background: The importance of theory is increasingly recognised in primary research and evidence synthesis. Indeed, an understanding of the theory underpinning interventions in disciplines such as health, social welfare and education can improve intervention design and implementation and may ultimately increase effectiveness. However, this critically depends on the appropriateness, quality and utility of a given theory to the research question at hand. A plethora of theories, frameworks or models in the literature have the potential to be of use, and how to identify, appraise and ultimately select the most relevant ones is not straightforward.
Objectives: We conducted a methodology review to identify existing systematic reviews of theories, models or frameworks as well as existing methodological guidance with a view to developing guidance on how to conduct systematic reviews of theories, frameworks or models. For this purpose, we specifically examined methods for searching, addressing the quality of, selecting and synthesising (where appropriate) and presenting or reporting theories.
Methods: We conducted systematic searches in MEDLINE and EMBASE, complemented by citation searches in Google Scholar and expert consultations. Studies meeting the pre-defined inclusion criteria were catalogued and relevant data extracted onto a table. Evidence synthesis was undertaken according to best-fit framework synthesis using the SALSA (Search, AppraisaL, Synthesis, Analysis) framework.
Results: Current systematic reviews of theories make suboptimal use of systematic searches, citation searches and expert consultation. While some reviews appraise aspects of the quality or utility of the theories identified, we did not identify a standardised tool that facilitates the systematic assessment of both the methodological quality and utility of a theory. Analysis of theories were thematic or framework based and results were presented narratively, in a table or graphically.
Conclusions: Current approaches to conduct methodology reviews are diverging. Based on the review we will developed a guidance on how to conduct systematic reviews of theories.

2076

Searching for systematic reviews: How easy are they to identify in biomedical databases?

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Background: Quick and accurate identification of systematic reviews (SRs) and meta-analyses (MAs) has become increasingly important, both with the growing number of ‘umbrella’ reviews, and the dramatic increase in SR publication. With funding for medical research already at a premium, it is important that money is not spent on research where previous SRs already exist.

Objectives: PRISMA guidelines state that SRs and MAs should be identified as such in both title and abstract. We used the KSR Evidence database to establish how many SRs/MAs adhere to these guidelines and how easily they can be retrieved in primary databases of biomedical literature.
Methods: Seven databases are searched for KSR Evidence, using a sensitive SR search filter created by KSR Information Specialists. There are currently >30 000 SRs/MAs on KSR Evidence, identified from screening over 135 000 references (after deduplication). This dataset is used to analyse how SRs/MAs are identified in the literature.
Results: Numerous methodological terms are used to describe SRs/MAs, many of which do not adhere to PRISMA guidelines. 12% of the studies claiming to use PRISMA do not have SR/MA in their title. SRs/MAs often do not clearly describe their methods in the title and abstract, and some can only be found using a sensitive search incorporating a wide range of search terms, which results in a substantially increased screening burden. Cochrane reviews do not include study design information in the title field.
Conclusions: SRs and MAs are clearly identified as such in the title of around 70% of relevant studies (Figure 1). Many other methodological terms are used in title and abstract, and inadequate description of methods is employed. This leads to inconsistency in the literature, makes it hard to locate relevant studies without the use of specialist databases or search filters, and hinders comprehensive indexing by database producers.

Attachments: L_Stirk_ identifying SRs and MAs.JPG

2077
Evaluation of the public health impact of Ixodes scapularis in Canada: A synthesis research approach

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Background: Ixodes scapularis (the black-legged tick) carries and transmits several pathogens to humans including Borrelia burgdorferi (Lyme disease), Powassan virus and Babesia sp. With climate change these tick vectors are expanding their geographical range northward. It is predicted that an increasing proportion of Canadians will be living in tick endemic areas.
Objectives: Conduct scoping reviews (ScR) of the literature on several vector-borne diseases transmitted by I. scapularis and other ticks in Canada. Prioritise systematic reviews (SR) and develop evidence-informed summaries in support of public health decision making, research and prevention activities.
Methods: ScRs identified and classified the literature on B. burgdorferi, Powassan virus and Babesia sp. Several SRs were prioritised to examine the evidence on risk factors, mitigation strategies, and the burden of disease in Canada and the United States. The ScR and SR methods have been adapted to accommodate diverse evidence and study designs.
Results: The ScRs include 2294 publications for Lyme disease (literature up to Sept 2016), 164 publications for Powassan virus (Nov 2016) and XXX for Babesiosis (Feb 2017) will be presented at the Summit. These include research on the pathogens, humans, vectors and non-human hosts. Key knowledge gaps were vector range and density of pathogens in ticks and the importance of potential reservoirs (e.g. birds infected with B. burgdorferi). This is important for understanding transmission dynamics, spread of the pathogens, and risk of exposure in humans.
Conclusions: The ScR information can be used to answer urgent requests for information; funding research to address knowledge gaps; and to prioritise SRs. SR outputs include evidence-informed summaries and inputs for quantitative inputs for quantitative-risk assessments. The transparency and accountability of synthesis research methodologies combined with a framework for timely response to urgent information requests to address long-term priorities through ScRs and SRs, has laid the foundation for how synthesis research can be used for decision making on vector-borne disease issues.

2078

The effectiveness of daily sedation interruption in patients in intensive care units: A systematic review for adult ventilated patients

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Background: Daily sedation interruption (DSI) has been proposed as a method of improving sedation management of critically ill patients by reducing the adverse effects of continuous sedation infusions. Different DSI protocols have been suggested with different drugs, discontinue duration and assessment instruments, and seem to lack a systemic guideline. Thus, it is vital to understand the effectiveness when carrying out DSI in adult ICU.
Objectives: The purpose of this review is to synthesise the effects of daily sedation interruption for adult ventilated patients in intensive care units.
Methods: We searched randomised clinical trials comparing sedation protocols with daily sedation interruption in critically ill patients requiring mechanical ventilation. The databases include: PubMed, CINAHL, Embase, the Cochrane Library and Chinese databases, covering the period between 1960 and March 2017. The relevance of papers selected for retrieval was assessed by 2 independent reviewers for adherence to the inclusion criteria. Additionally, the methodological quality of those studies that met the inclusion criteria were critically appraised by the 2 reviewers using the standardised critical-appraisal instruments from the Joanna Briggs Institute Meta Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI).
Results: Ten trials were included in the analysis (n = 1390 patients). There were not differ between DSI and non-DSI groups include: duration of mechanical ventilation, length of hospital stay, ICU mortality, the risk of self extubation, hospital mortality, reintubation within 48h-72h. DSI groups were associated with a decrease in the length of ICU stay (mean difference = -1.58 days; 95%CI [-3.16 – 0.01] days; I2 = 66%) and a lower risk of requiring tracheostomy (odds ratio [OR] = 0.67; 95%CI [0.50 – 0.91]; I2 = 0%).
Conclusions: We have found that DSI decrease the ICU stay and the risk of requiring tracheostomy. But there is no statistical difference in other results, so more research is needed to prove its clinical effectiveness.

2079

How to choose biomedical databases to conduct systematic reviews for Chinese reviewers: A comparison between biomedical databases

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Background: Systematic reviews provide the most reliable evidence for certifying some treatment's effect and safety, and enable decision making for clinical practice.Therefore, it is vital to retrieve the relevant literature comprehensively and objectively as far as possible.
Objectives: To help systematic reviewers in China select the best biomedical databases from which to retrieve relevant trials according to comparison of coverage, search feature, and so on.
Methods: Three foreign biomedical databases (MEDLINE, EMBASE and the Cochrane Central Register of Controlled Trials (CENTRAL)) and four Chinese biomedical databases (China Biology Medicine (CBM), CNKI, VIP and WANFANG) were selected. Data about coverage, search features, records downloading, and presence were found through their websites. The deadline for data collection was the end of April 2014. Based on the data collected, the number of journals from the inaugural issue and indexed cover-to-cover were calculated.
Results: In MEDLINE there were about 5695 indexed journals, and about 5728 in EMBASE; about 2000 are nonredundant. The kinds of indexed journals in CENTRAL are relatively comprehensive, but it updates four times a

year. For the four Chinese databases, the way CBM retrieves is similar to the three foreign databases. CBM indexed fewer articles than CNKI, but indexed the most journals (1784, 91%). It provides MeSH searching and more terms than other databases, and has an output of the tagged texts up to 500 records per file. CNKI and WANFANG provide English interfaces, which is convenient for English searching, and CNKI has a function of 'Cross-Language Search', which automatically translates English into Chinese.
Conclusions: At the very least Chinese systematic reviewers should search MEDLINE, EMBASE, CENTRAL and CBM. CBM is the preferred database for systematic reviewers to retrieve relevant studies in Chinese, while CNKI is recommended for non-Chinese-speaking researchers due to its English interface and 'Cross-Language Search' function.

2080
The first Cochrane Network ever: Spreading Cochrane activities in Brazil

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Background: In such a large country as Brazil (the world's fifth largest nation), it is cumbersome to perform educational activities in regions far from the Cochrane Brazil Centre, in the state of São Paulo, as people may have to travel thousands of kilometers to attend systematic review or meta-analysis workshops.
Objectives: To disseminate a pioneering initiative for surpassing barriers in spreading education and training within a continental country.
Methods: Cochrane and Cochrane Brazil decided to take action to shorten these distances. The solution was the creation of Cochrane Affiliated Centres, subordinated to Cochrane Brazil, in different states, and sought collaboration among systematic review authors and experienced professors in each region. Last March, these partners have agreed to voluntarily collaborate with workshop training activities locally, as well as translation and dissemination efforts, and procedures for the official launching began.
Results: Five affiliated centres were created: Paraíba (in the city of João Pessoa), Rio de Janeiro (in the city of Petropolis), Amazon Region (in Belém, state of Pará), Ceará (in the capital, Fortaleza) and Minas Gerais (in the city of Muriaé). Each affiliated centre has a co-ordinator, responsible for leading the proposed activities and for finding the necessary human and financial resources (pending conflicts of interest evaluation by Cochrane Brazil). The co-ordinators were enrolled among alumni of the graduate course of Evidence Based Health at Universidade Federal de São Paulo and among participants of the Distance Learning Course of Evidence Based Health. A 3-year agreement was signed and some activities have already began, even before the official inauguration of some centres, as shown in Table 1, which reveals clear demand for these services to be provided locally.
Conclusions: The creation of affiliated centres for concentrating efforts in large countries as Brazil might help to overcome the challenges of training for systematic reviews methodology and of disseminating quality evidence. Cochrane Brazil's 20-years experience will help the affiliated centres.

Attachments: Table Affiliated Centres.pdf

2081
Integrating quantitative and qualitative evidence in systematic reviews: To pool or not to pool?

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Background: Mixed-studies review, also known as mixed-methods review, mixed research synthesis or a systematic review integrating quantitative and qualitative studies, is becoming popular in health services research. This approach to systematic review draws upon the strengths of both quantitative and qualitative studies, and overcomes the issues associated with independent synthesis of one type of evidence alone. Currently, there is no consensus with regards to how such reviews should be conducted.
Objectives: The aim of the presentation is to describe the methodology of the Joanna Briggs Institute for undertaking a systematic review of quantitative and qualitative evidence.
Methods: The Joanna Briggs Institute organised a working group of seven experienced secondary researchers to develop guidance for mixed-studies review. Email correspondence, teleconferences and round table discussions were held to gather feedback and achieve consensus on the proposed methodology.
Results: The Institute has adopted a practical framework for synthesising evidence from quantitative, qualitative and mixed-methods studies. The methodology is drawn predominantly from Sandelowski's approach to mixed-research synthesis with appropriate consideration of the body of literature on mixed-methods research and mixed-research synthesis. The methodology highlights the key elements to consider when undertaking mixed reviews and how these elements impact on the approach to synthesis. A set of examples to illustrate the different approaches to synthesis are provided.
Conclusions: Mixed-studies reviews allow a more comprehensive and richer understanding of the question of interest, and are particularly useful for understanding complex interventions or multi-level processes that are common in health quality improvement initiatives.

2082
Integrating expert-based content into guideline development when literature is limited

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Background: Chagas disease (CD) is a neglected tropical disease caused by the protozoan Trypanosoma cruzi. Two drugs are available for its treatment: benznidazole and nifurtimox. Although these medications prevent CD vertical transmission, guidelines do not recommend their use during pregnancy due to risk of teratogenicity. In a systematic literature search we found only two case reports of pregnant women using benznidazole, both showing no congenital abnormalities. This evidence is very limited to provide clinical recommendations.
Objectives: To systematically collect physicians' experience with benznidazole and nifurtimox in pregnant women with CD using structured forms.
Methods: We conducted an online survey with physicians with experience in CD treatment, between December 2016 and March 2017. Forms included questions related to physicians' previous experience with the use of benznidazole and nifurtimox in pregnant patients with CD, including infant outcomes if known.
Results: We contacted 35 physicians of which 17 completed the survey. Only two reported use of benznidazole in a total of four pregnant patients, and there was no report of vertical transmission, congenital abnormalities or pregnancy complications. Data are still being collected and will be used for the development of the Brazilian Guideline for Diagnosis and Treatment of Chagas Disease. Full results will be presented at the Conference.
Conclusions: Although clinicians do not have much experience in prescribing antiparasitic drugs to pregnant women with CD, in this survey we identified twice the number of cases published in the literature. It is important to recognise the high risk of recall bias in this approach, resulting in low-quality evidence. However, the systematic and structured collection and analysis of experts' experience can be considered similar to a case series report and may provide complementary evidence for guideline development when there is limited evidence in the literature.

2083
Antiphospholipid syndrome – Cochrane reviews in primary and secondary prevention vs. non-Cochrane reviews and practice guidelines on similar topics

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Background: We have been working on 2 Cochrane reviews on primary and secondary prevention of thrombosis in patients with the presence of antiphospholipid antibodies and patients with diagnosed antiphospholipid syndrome, respectively.
Objectives: To compare methods and outputs of our 2 Cochrane reviews and other non-Cochrane systematic reviews (SR) and SR done within the framework of clinical practice guidelines (CPG) published on similar topics since 2010.
Methods: We have registered both Cochrane reviews in the appropriate Cochrane group (Stroke and Vascular Group). For the secondary-prevention review we included for comparison all SR and CPG which contained SR within their framework, which came up with our search. For the primary-prevention review we have run additional searches for SR/PCG.
Results: For the secondary prevention review we have identified 8 articles – 1 meta-analysis(MA), 2 SR and 6 evidence-based CPG. In Cochrane review our comprehensive search strategy delivered 6 included studies, 2 studies pending classification and 5 ongoing trials. In 3 non-Cochrane review/CPG information about searched sources was not provided and in 5 articles covering of 1 to 8 databases was reported. Identified non-Cochrane MA/SR/CPG included from 1 to 3 studies out of those listed in our review. In 5 of them the question was more focused than in our review or one of the studies was not available at that time, for 3 CPG the search was limited or unclear and the number of studies identified was lower than in our review. The primary prevention review is still ongoing, the results of the comparison will be presented at the Summit.
Conclusions: A comprehensive search without language restriction, diligent tracking of conference abstracts and maintaining a specialised registry by the Cochrane group, as well as comprehensive search of ongoing trial registries allowed us to identify more studies on the management of antiphospholipid syndrome than previous reviews and CPG. Therefore, evidence from our Cochrane reviews can become basis for future guideline updates.

2084

Quality of studies published as systematic reviews or meta-analyses in Polish journals listed on Thomson Reuters Master Journal List

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Background: Previous research on the quality of systematic reviews (SR) and meta-analyses (MA) showed it was unsatisfactory, mainly due to poor methodological reporting. Thomson Reuters Master Journal List (TRMJL) contains journals assigned Journal Citation Reports Impact Factor. No research on the quality of SR and MA published in Polish journals figuring on this list has yet been reported.

Objectives: To assess the quality of studies published as SR or MA in Polish journals listed on 2016 TRMJL within the field of internal medicine and surgery and to compare it to the quality of such studies published in journals listed in 2011.
Methods: Following a protocol published in PROSPERO we identified Polish journals in the field of surgery and internal medicine. We searched for the studies in those journals using terms 'meta-analysis' and 'systematic review' in an Ovid Medline and Embase and in every journal's official site. The quality of each SR and MA was scored using the AMSTAR checklist (total score from 0 to 11). Two authors assessed the quality of each article independently, any discrepancies were resolved by discussion among all authors.
Results: We identified 101 papers (24-2011; 77-2016). After de-duplication and applying of exclusion criteria, we assessed the quality of 35 included articles (9-2011; 26-2016). Mean AMSTAR score was approx. 25% higher in 2016 than in 2011 (3.73 vs. 3.0). The item most frequently scoring 0 was 'conflict of interest (COI) statements' in 2016, while in 2011 - items related to: 'using the quality of primary studies in formulating conclusions' and 'COI statements'. The largest difference in favour of 2016 vs. 2011 was observed in the item 'combining the findings of studies' (MD=0.4; Ratio of mean quality=2.2). The most similar results were in the item 'inclusion of studies on the basis of publication status' (MD=0.01; Ratio of mean quality=1.04).
Conclusions: Although the quality of studies published as SR and MA in 2016 improved as compared to those published in 2011, it is still unsatisfactory. We highly recommend that journal editors and peer reviewers pay more attention to the methodological quality of accepted SR and MA.

2085

Implications of different methods for literature searching and assessment in systematic reviews and meta-analyses: A case study

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Background: The development of an adequate literature search strategy when performing a systematic review and meta-analysis of epidemiologic studies may represent a key methodological issue. Objective: We explored how adding citation chasing to a standard literature search may modify summary estimates computed in a systematic review and meta-analysis.
Methods: We searched the literature through online databases about the effect of supplemental potassium intake on blood pressure in hypertensive individuals, from the early available date till February 2016.
Results: We retrieved 316 records in MEDLINE, 335 in Embase and 309 in CENTRAL. After de-duplication and title/abstract screening, 26 eligible studies were identified and 22 could be included in the meta-analysis. A further extended search based on backward and forward citations of relevant articles and other resources, and particularly on citation chasing, allowed us to identify 7 additional studies, 3 of which eventually eligible for the meta-analysis. Using the conventional search, overall potassium supplementation was found to decrease systolic blood pressure (SBP) of 3.64 mmHg (95% confidence interval (CI)2.12 to 5.15) and diastolic blood pressure (DBP) of 2.13 mmHg (95% CI 0.48 to 3.79). Using the extended search, SBP decreased by 4.48 mmHg (05% CI 3.07 to 5.90) and DBP by 2.96 mmHg (95% CI 1.10 to 4.82). Little difference between the studies retrieved by the two methodologies emerged by assessing the quality of evidence using the GRADE approach and the risk of bias with the RoB 2.0 tool. Conclusion: Traditional literature search strategies generally retrieve most of the relevant studies for systematic reviews and meta-analyses. However, they may fail to identify all relevant studies potentially eligible for the analysis, thus affecting to some extent the validity of the summary estimates. Unconventional strategies using backward and forward reference searching may substantially improve the completeness of the literature.

2086

Area of prediction ellipse in diagnostic test accuracy reviews: Implementation in R and application to different review scenarios

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Background: Systematic reviews of diagnostic accuracy studies must contend with a great deal of variability. The more variability in accuracy between studies beyond chance not explained, the more difficult it is to come to robust conclusions about the clinical implications of the results of the meta-analysis. A recent meta-epidemiologic study evaluating diagnostic reviews shows that most reviews still use univariate methods not routinely accepted in Cochrane diagnostic test accuracy (DTA) reviews such as Cochran's Q test and I2 to quantify heterogeneity. Numerical estimates of the random-effect terms in the hierarchical models do quantify the amount of heterogeneity in terms of between-study variances (τ2s) and prediction regions on log odds scale which are rarely reported.
Objectives: To implement a modified approach to quantify heterogeneity in diagnostic reviews: the calculation of the area of the ellipse prediction on proportion scale and compare its behaviour in different situations of heterogeneity.
Methods: We will show the results of the meta-re-analysis using several datasets of published diagnostic reviews that show different heterogeneity scenarios: i. No correlation, low heterogeneity; ii. No correlation; moderate heterogeneity; iii. No correlation; highly heterogeneous (sensitivity or specificity); iv. Moderate correlation; moderate heterogeneity and v. High correlation; high heterogeneity. We will show the Area of the prediction region within the ROC plane to visually illustrate its relationship with between study variances (τ2s) and different proposed I2 statistics.
Results: We will provide routine application to different heterogeneity scenarios. Routines in R or STATA will be discussed.

2087
Heterogeneity in diagnostic-test accuracy Cochrane reviews

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Background: Evaluation and reporting of the heterogeneity in diagnostic-test accuracy (DTA) reviews is not standardised. A recent evaluation of diagnostic reviews identified through EMBASE and MEDLINE revealed serious flaws in heterogeneity reporting. The review proposes a guidance on testing for and quantifying variability in reviews of diagnostic test accuracy following 5 steps: 1: visualise total variability; 2: judge whether there is more variability in sensitivity and specificity than can be expected due to chance (sampling error) alone; 3: measure the total between-study variability; 4: attribute some of the between-study variability to the threshold effect and 5: explore what study features might explain some of the variability.
Objectives: To describe: 1) the methods used to evaluate heterogeneity in DTA review protocols and full reviews and to assess the degree of completeness in heterogeneity analysis; 2) how the results of between-study variability were used to guide the analytical approach; and, 3) how heterogeneity was interpreted regarding implication for clinical practice.
Methods: We will include all DTA review protocols and DTA Cochrane reviews published in the Cochrane Library from its inception to March 2017. To assess the degree of completeness in heterogeneity analysis we will use the guidance propose by Naaktgeboren et al. We will classify the results in three categories: i. complete heterogeneity

evaluation: completed the 5 steps; ii. Incomplete evaluation: completed 3 steps; insufficient evaluation: less than 3 steps.
Results: We will provide a detailed description and discussion of the review results.

2088
Selective searching for high-quality health-related evidence syntheses – more bias or time gained?

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Background: Cochrane and other organisations producing health-related evidence syntheses advocate using a comprehensive search approach consisting of sensitive search strategies conducted in multiple databases. This results in resource-intensive and time-consuming search and screening processes. Findings of two recent publications suggest that further exploration of the current recommendation is warranted.
Objectives: We aimed to reproduce and complement the findings by Halladay 2015 (1) and Hartling 2016 (2) by investigating a third dataset of Cochrane Reviews regarding the impact of non PubMed-indexed publications on the overall results.
Methods: We included all reviews (n = 47) produced in the last 5 years by the Cochrane Metabolic and Endocrine Disorders Group and retrospectively checked the origin of studies used (not only assessing included studies, but also those ongoing and awaiting assessment). We analysed whether the restriction to publications indexed in PubMed resulted in relevant changes to the effect measures. The reviews were classified by population and type of intervention.
Results: We extracted 1037 publications from 47 reviews. 89% of publications were available in PubMed. An analysis of those reviews using more than 1/3 of publications not included in PubMed showed that these were reviews on complementary medicine and dietary supplements. After excluding all reviews on both of these topics 92% of publications were available in PubMed. We are currently calculating the effects on the meta-analyses and will present results at the Summit.
Conclusions: Preliminary evidence suggests that selective searching produces less bias than previously assumed, but primarily relates to reviews evaluating therapeutic interventions and focussing on clinical trials. It probably does not apply to all types of therapeutic interventions. Further research is needed to confirm in which topics a selective literature search can be a sound practice and whether this approach is suitable for clinical practice guidelines as well. 1. Halladay et al. Clin Epidemiol. 2015 Sep;68(9):1076-84. 2. Hartling et al. BMC Med Res Methodol. 2016 Sep 26;16(1):127.

2089
Alternative methods for conducting qualitative syntheses: Primary data versus published findings

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Background: Proponents of 'open data' have identified numerous benefits of this approach: increasing outputs of research, improving transparency, promoting equal access, stimulating innovation, and improving sustainability of data. Many journals now require open access to datasets, and the number of data repositories is quickly growing. Nevertheless, to date qualitative syntheses have not explored the possibility of original dataset as sources.
Objectives: To determine the feasibility and potential benefit of a qualitative synthesis from primary data.

Methods: A comparative analysis was undertaken of two approach to qualitative synthesis: 1) from published findings, and, 2) from primary data. Data for both methods were derived from the four Community Level Interventions for Pre-eclampsia (CLIP) feasibility studies. Both syntheses followed thematic synthesis methods.
Results: Findings revealed advantages and drawbacks of methods to be considered (Figure 1). Advantages of synthesis using primary sources include: access to comprehensive data, the classification of participants/groups is straightforward for sub-group analyses as the data are not restricted by the analyst's interpretation and presentation of the findings. New insight is possible as analysts do not rely on previous interpretation of data, increasing the likelihood of novel findings. In addition, translation of themes across methodologies can be more easily achieved. Still there are advantages of the classic synthesis of publications. Relevant findings/data for extraction and synthesis is straightforward and can be replicated by other researchers with similar results. The greatest advantage of this method is its comparable speed, as a result of concise data for analysis.
Conclusions: Both approaches have inherent advantages and disadvantages. The synthesis of primary data is feasible and may be justified for the purpose of deeper analysis if resources permit. This shift to open access databases may facilitate the synthesis of qualitative data in the future.

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2090
Systematic reviews – leading or misleading?

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Background: Patients who undergo invasive procedures in light sedation often feel pain during the procedure. Hypnotic analgesia as an adjunct to usual analgesia to relieve such pain has been investigated in numerous trials.
Objectives: To identify appraise and synthesise the best available evidence on the effectiveness of hypnotic analgesia in the management of procedural pain in adults undergoing minimally invasive procedures.
Methods: Randomised-controlled trials and quasi-experimental before and after studies, where hypnotic analgesia was used as an adjunct and compared to usual pharmacological analgesic were included in this systematic review. Outcomes were patient-rated pain, - pain intensity, -anxiety, amount of pain medication used; procedure-length and adverse events. Two independent reviewers used the standard appraisal tools from the Joanna Briggs Institute to assess the methodological quality of the studies and data extraction.
Results: Nine randomised-controlled trials and 1 quasi-experimental study with 1365 patients were included. No significant difference in pain intensity and anxiety was found. In 5 out of 5 studies a reduction of pain medication was reported even if patients did not report lower pain intensity. Discussion/Conclusion: The quantitative results of this systematic review did not report clear evidence of the feasibility of hypnotic analgesia and a significant reduction in pain intensity. However, findings from qualitative studies show that patients do experience pain but use hypnosis as a strategy to manage the pain. In the included studies, pain intensity was measured by using conventional instruments developed to measure pain intensity in trials, to assess the effectiveness of analgesics, which is fundamentally different from patient's management of pain. From a methodological point of view, it is most relevant to discuss the risk of bias by doing systematic reviews that do not consider this type of problem, as they might miss and not recognise the effect of an effective intervention, because studies included have measured patient-related outcomes with instruments that do not capture the true essence of the phenomenon.

2091
Comparative meta-analysis of diagnostic studies: A review and comparison of currently proposed approaches

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There is increasing interest in comparative meta-analysis of diagnostic studies which evaluates the accuracy of a test relative to an alternative test. Researchers have attempted to develop a network meta-analysis (NMA) like approach for evaluating two or more tests simultaneously. Several approaches have been proposed in recent years (e.g. Trikalinos 2014, Ma 2015, Menten 2015, Dimou 2016 and Hoyer 2016) . They share some common features but there are also conceptual and statistical differences among them. In this study, we aim to give a comprehensive review of the currently proposed approaches for comparative meta-analysis of DTA studies. We compared the following features with respect to conducting a comparative meta-analysis: 1) input data requested from primary studies; 2) assumption of common threshold; 3) focus on absolute or relative accuracy; 4) inclusion of indirect evidence; 5) detecting inconsistency; and, 6) statistical package of implementation. We also investigated and compared the performance of these approaches using simulation. The simulation is done by 1) generating summary test results data (2×2×2 or 2×2 tables) based on assumptions of these approaches; and, 2) generating original test results from individual patients, which is more close to real world but in this case the assumptions on the distributions of sensitivity and specificity may not be valid.

2092

The effectiveness of interventions on reducing social isolation in older persons: A systematic review of systematic reviews

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Background: Globally older persons (60+) are a rapidly growing population group with evidence of increased social isolation and loneliness in this group, especially for those living in residential care settings.To facilitate an intervention for social loneliness, a systematic review of interventions to reduce loneliness in older people was conducted
Objectives: What is the evidence of the effectiveness of interventions to decrease social isolation/loneliness for older people (60+) (inclusive of connected health interventions), living in community/residential care.
Methods: Registration in Prospero, followed by systematic search of 12 databases for articles published 2000-2017 in English using search term synonyms for older people and social isolation. Two independent researchers, and a third for discrepancies, screened articles and extracted data. Based on the high number of systematic reviews found at initial search, search was restricted to systematic reviews and AMSTAR was used to assess quality of reviews.
Results: Initial search revealed 13 relevant articles.There has been an increase in reviews in the past 5 years addressing social isolation and loneliness, especially from the East. Many studies failed to separate the concepts of loneliness and social isolation. Loneliness was most frequently measured using the UCLA [University of California Los Angeles], yet critiqued as insensitive to change. Social-isolation measures were multiple making it difficult to identify the most effective measure to improve or mitigate against social isolation. There was no uniform measure across reviews for effectiveness. Medium or high level of bias were evident with short-term efficacy seen after 6 weeks, yet longer sustained studies were less evident. Intervention studies were group, individual or connected health focused, with groups showing relevance. Rigour lacking in ICT studies with need to evidence facilitating conditions. Mobile phones were an untapped source for interventions for social isolation.
Conclusions: There is potential for developing interventions to address social isolation and loneliness using mobile phones combined with face-to-face contact.

2093

Development of an approach to conduct and report scoping reviews

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Background: A scoping review or study is a particular approach to the mapping of evidence that is distinct from systematic reviews. While a framework has existed for the conduct of scoping reviews since 2005, there has been limited consensus and little clear guidance for how to conduct and report them.
Objectives: To describe the work of a methodological working group of the Joanna Briggs Institute to develop guidance for the conduct and reporting of scoping reviews, and to provide an overview of reviews that have used the methodology to date.
Methods: The working group comprised of 6 participants who corresponded via teleconference, email, and face to face meeting during a 6-month development period. Discussion and testing elements of methods for the conduct of a scoping review were held over this period culminating in a practical workshop. Workshop participants, review authors and methodologists provided further testing, critique and feedback on the proposed methodology. A number of review groups have developed scoping review protocols and reports using the methodology.
Results: Details are provided regarding the essential elements of a JBI scoping review, including articulation of the objective and review question, nuances of the inclusion criteria, and search strategy. An overview of scoping review protocols and reports that have used the JBI methodology is described to illustrate how relevant data may be extracted and mapped from included studies.
Conclusions: Scoping reviews are a useful addition to the repertoire of tools available to knowledge users in healthcare to gain a better understanding of a broad topic area. Scoping reviews using this methodology are being conducted to meet a number of different objectives.

2094
Responsiveness: A unique psychometric property to consider in evidence-based practice

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Background: Responsiveness is not new to the areas of psychometrics. Responsiveness refers to the ability of an instrument to distinguish clinically important changes as the result of an intervention (Guyatt, Walter, & Norman, 1987; Kirshner & Guyatt, 1985). Responsiveness is not without controversy some researchers argue that is not a unique property, but rather a function of validity (Lindeboom, Sprangers, & Zwinderman, 2005). Initially responsiveness appeared in the quality of life literature but has now been reported in many areas of intervention research. Including depression (Williams, et al., 2016), Spinal cord injury (Kalsi-Ryan et al., 2015), stroke (Hsueh, Chen, Chou, Wang, & Hsieh, 2013), traumatic brain injury (Mossberg & Fortini, 2012), cardiac rehabilitation (Puthoff & Saskowski, 2013), and pain (Walton, Levesque, Payne, & Schick, 2014), to name a few. Whether you are a researcher or a consumer of research, understanding the psychometric property of responsiveness can provide an additional way to view evidence. While the gold standard for building strong evidence for interventions is statistical significance, there may be a place for clinically significant differences. While statistically significant differences and clinically significant differences are clearly different, each has a role in measuring how an intervention can be viewed. Responsiveness remains a largely overlooked psychometric property and currently not included in systematic review methodology for examining instrument strength. Similarly, it is not typically

used as an integral part of the clinical decision-making process. Therefore, it is important for researchers to investigate whether responsiveness should be taken in account.
Objectives: The purpose of this presentation is to: Explore the concept of responsiveness historically and practically as it relates to instrument development and; determine if/how responsiveness can contribute to evidence-based practice methodology and practice.

2095

Including non-randomised studies or letting them go unchallenged? - Experiences from a Cochrane review on screening for malignant melanoma

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Background: High-quality evidence from randomised trials is a general requirement for the introduction of population-based screening programmes. However, for some types of screening no relevant data from randomised trials exist, while the intervention is nonetheless offered in nationwide programmes based on apparent beneficial effects seen in non-randomised studies. When performing a Cochrane review on screening for malignant melanoma, we ended up in a dilemma; should we include non-randomised studies in our review or should we ignore them?
Objectives: To find out how to deal with problems arising when high-quality evidence from randomised trials is lacking, while low-quality evidence from non-randomised studies has been used to justify a screening programme. Method: Reflections based on experience from encountering this dilemma in a Cochrane review on screening for malignant melanoma.
Results: We had preplanned not to include non-randomised studies in our review. However, while working on the review we encountered a number of non-randomised studies frequently used to justify this type of screening. In the discussion part of the review, we chose post hoc to evaluate those non-randomised studies that had influenced national policy, using the ROBINS-I tool (Risk Of Bias In Non randomised Studies of Interventions). Conclusion: Including non-randomised studies leads to a massive extra workload compared to restricting inclusion to randomised trials only, which will inevitably increase time to publication. Additionally, including data from non-randomised studies in a Cochrane review on population screening might legitimise the use of such interventions based on low-quality evidence for other screening programmes. However, if we do not assess the merits of studies that have been pivotal for far-reaching public health decisions, it would reduce the relevance of the corresponding Cochrane reviews. A compromise might be to evaluate the most relevant non-randomised studies in the discussion section of the review. However, to evaluate some non-randomised trials without performing a systematic search might introduce selection bias.

2096

Quantitative and qualitative studies as well as patient input in a health-technology assessment on Foetal Alcohol Spectrum Disorders (FASD)

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Background: Foetal Alcohol Spectrum Disorders (FASD) includes several conditions characterised by a spectrum

of symptoms ranging from physical birth defects to neurodevelopmental disorders, which may be caused by alcohol consumption during pregnancy.
Objectives: The aim was to assess health, social situation and interventions for individuals with a FASD condition. The overall questions were how different FASD-related conditions, and interventions aimed for these conditions impact the child and his/her relatives, from a social, medical and economical perspective.
Methods: We conducted 3 systematic reviews assessing: prevalence of disabilities and social situation of individuals with FASD; effectiveness and cost-effectiveness of interventions offered to individuals with FASD and their parents; and, experiences of individuals with FASD and their families regarding the conditions and interventions. The level of confidence in the quantitative and the qualitative syntheses were assessed using the GRADE or CERQual approach, respectively. Patient input was collected through a collaboration with a non-profit organisation for individuals with FASD and their relatives.
Results: Although the included studies did not provide a clear picture of the prevalence of disabilities, nor any guidance for selecting specific FASD forms of interventions, a lot can be improved with regards to the treatment given by professionals. Individuals with FASD and their parents clearly point out the need for more knowledge, understanding and support from professionals within the healthcare, social services and education systems.
Conclusions: Using various approaches, this assessment gives a comprehensive picture of what is known about the prevalence of disabilities in individuals with FASD-related conditions, the experiences of living with FASD and the effectiveness of interventions.

2097

Evaluating the quality of evidence and classification of intervention approaches for children with difficulties – two sources of unreliability

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Background: When meta-analytic reviewers attempt to determine which intervention approach might be most effective, they often cluster apparently similar methods into subgroups so that an aggregated effect size for each can be computed. On the basis of the highest effect size, they then recommend that type of intervention. Fundamental to this approach is the reliable and valid evaluation of the quality of evidence for each trial, the clarity of description of the main characteristics of a particular form of intervention, and the subsequent reliability and validity of the reviewers' classification of each trial into different subgroups. To date, little information is available on whether meta-analytic reviewers agree on the ways they evaluate the quality of evidence, classify and name intervention for children with developmental coordination disorder (DCD), and what the sources of discrepancy are.
Objectives: To examine the consistency with which trials' quality of evidence is evaluated and intervention approaches are classified within 3 recent systematic and meta-analytic reviews of studies purporting to evaluate intervention outcomes on children with DCD and to address the problems encountered.
Methods: Two authors independently assessed the consistency in evaluating the quality of evidence for each trial and classifying intervention approaches for children with DCD in 3 recent comprehensive systematic and meta-analytic reviews. Any discrepancies in their assessment were resolved by discussion.
Results: Both evaluation of the quality of evidence and classification of intervention approaches yielded the same discrepancy rate of 25% across the 3 reviews.
Conclusions: Grouping together approaches to intervention which actually differ on some critical feature may lead to the dissemination of inaccurate information. When future meta-analytic reviewers conduct a subgroup analysis, they should gain in-depth knowledge of evaluating the quality of evidence and each intervention approach, and seek expert opinions widely to ensure the reliability and validity of the quality of evidence and the subgroup classification.

2098

Identifying key mechanisms of effective mental health and psychosocial support programmes: A cross-study synthesis of the findings from qualitative and quantitative evidence

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Background: The current evidence base in Mental Health and Psychosocial Support (MHPSS) suggests that there is a need to address the complexity of the relationships between implementation and programme impact (Bangpan et al. 2015). Further examination of the links between programme features, delivery mechanisms and the effect of programme outcomes may benefit future programme development. Drawing on a broad range of evidence, and synthesising findings of different study designs offers opportunities to address the challenge to provide invaluable insights to inform policy and practice decisions.
Objectives: To present methods of combining findings from process and outcome evaluations to explore key mechanisms of effective MHPSS programmes.
Methods: We synthesised evidence from process and outcome evaluations using a Cross-Study Synthesis (CSS) approach. First, we synthesised qualitative data from process evaluations to identify key mechanisms or programme design potentially influencing the effectiveness of MHPSS programmes. Secondly, also performed a meta-analysis to evaluate the impact of MHPSS programmes. Thirdly, we coded the outcome evaluations to explore whether programmes have considered the identified key mechanisms when designing/delivering the programmes. Finally, we explored the key mechanisms in effective MHPSS programmes on PTSD and depression using meta-regression and comparative analysis of evidence . Findings: We included 13 process evaluations and 46 outcome studies. Six key mechanisms were derived from process evaluation studies. The findings from CSS suggest that: 1) having trained providers in MHPSS programmes; 2) having socially adapted programme activities; or, 3) establishing good relationships with recipients, are key mechanisms of effective MHPSS programmes. Conducting the CSS provides the opportunity to identify which key mechanisms generated by the process synthesis are currently being addressed by existing MHPSS programmes, and where there are gaps. It also supports a greater explorative analysis, identifying which mechanisms are associated with the impact of MHPSS to inform future programme development.

2099

The not-so-systematic reviews: Challenges with misunderstanding definitions in environmental sciences

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Background: In several disciplines, systematic reviews are becoming an ‘industry standard’ for evidence synthesis. Many stakeholders in the field of medicine (including publishers, authors, commissioners and decision makers) are aware of the key principles of systematic review. In other fields, such as environmental sciences, however, systematic reviews are a relatively novel methodology, and whilst there is a general appreciation for the added value that a systematic review has over a traditional literature review, broadly speaking there is only a limited understanding of the necessary steps and safeguards needed to ensure a systematic review is truly reliable. As the field of evidence synthesis in environmental science continues to develop we face an increasing number of reviews that claim to be ‘systematic reviews’ despite lacking transparency and repeatability, performing little critical appraisal, failing to attempt comprehensiveness and often performing vote-counting.
Objectives: Here we present examples of poor quality and unreliable reviews that claim to be systematic reviews from the field of environmental management and conservation.
Methods: We have collated examples of syntheses that refer to themselves as ‘systematic reviews’ and select examples to demonstrate common limitations and sources of potential bias.

Results: We highlight commonly seen misconceptions regarding systematic reviews and map and the risks of the dilution effect of these sub-standard reviews. In particular, we use a key example of a recent review from the field of biodiversity and climate change to express our concerns.
Conclusions: We call for a concerted effort across disciplines to ensure that the standard of true systematic reviews remain high. Systematic reviews could be adversely affected by limited appreciation of the required rigour, transparency, repeatability and comprehensiveness required to conduct a systematic review.

2100

A core outcome set for asthma management: Consensus work across NICE Guidelines, Cochrane Airways Group and the COMET Initiative

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Background: The difficulties caused by heterogeneity in outcome measurement are well known to those involved in evidence synthesis including guideline developers. These issues could be addressed with the development and agreement on standardised sets of core outcomes. Currently, three pieces of work related to development of core outcome set for the management of asthma have been identified: •Core outcome set endorsed by European Medicines Agency (EMA) (supported by the COMET Initiative Management Group) •Outcomes Most Important to Patients, Public and Practitioners (OMIPPP) project on asthma (supported by NIHR and the Cochrane Airways Group) •NICE clinical guideline: Asthma management (publication date June 2017)
Objectives: To reach consensus on a core outcome set for asthma management.
Methods: An update search of the COMET database was conducted to identify new core outcome set studies, followed by a mapping exercise of core outcomes identified across the three pieces of work. Core outcomes that are suggested by all 4 sources will be deemed 'agreement reached' and included. Core outcomes that are suggested by at least 2 out of the 4 sources will be deemed 'agreement to be discussed'. An online survey using modified Delphi will be undertaken to reach consensus on these outcomes. Participants will include editors from the Cochrane Airways Groups, committee member from the NICE guideline, and previous participants from the OMIPPP project.
Results: It is anticipated that an agreed core outcome set for asthma management will be endorsed by NICE Centre for Guidelines (to inform future updates of the guideline) and the Cochrane Airways Group (to inform future Cochrane reviews and/or updates). Implications: Agreement of core outcome sets for other disease conditions across core outcome researchers, Cochrane groups and guideline developers will lead to more efficient use of scarce research resources.

2101

Evidence gap map on adolescent well-being in low- and middle- income countries: A focus on protection, participation and livelihoods

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Background: Although the understanding about the determinants of adolescent well-being outcomes in different areas is growing, little is known about how they interact. Similarly, while the need to incorporate a structural approach into programme design is gaining support, there is little guidance on systematic evidence-based approaches. A mapping of existing evidence is a key step in determining the effectiveness of existing programme approaches and identifying priorities for future research.

Objectives: To provide an overview of the existing evidence on the effectiveness of interventions (at the macro-, meso- and micro-levels) aimed at improving adolescent wellbeing in low- and middle-income countries. The focus is on key interventions and outcomes in the domains of protection and participation, and in the livelihoods domain excluding transferable skills and youth employment-related interventions and outcomes.
Methods: Building on the methodology pioneered by 3ie, the inclusion criteria for this evidence-gap map included 'systematic reviews' and 'impact evaluations' (RCTs and rigorous quasi-experimental designs). Its primary focus were studies with participants aged 10-19, conducted in low- and middle-income countries, published from year 2000 onwards. The search followed strict inclusion criteria for interventions and outcomes in the domains of participation, protection and livelihoods. Certain interventions and outcomes in these domains covered in other gap maps were excluded.
Results: The research is currently under way, but will be finalised in time for the Summit. We expect to not only outline the type and quality of research that exists in the three domains of adolescent well-being, but also to discuss methodological issues and new approaches adopted as part of the research process.

2102
Women's experiences of termination of pregnancy for foetal anomaly: A qualitative systematic review

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Background: Termination of pregnancy for foetal malformation has enabled couples to avoid the birth of an unhealthy foetus. However, it could be considered as a traumatic life event with high psychological impact. The existing findings from qualitative studies are presented from different points of view depending on the socio-cultural context of each study. Therefore, women's experiences and needs towards termination of pregnancy for foetal anomaly in a wide range of regions and socio-cultural contexts is required in order to gain a comprehensive understanding and make recommendations as a basis for evidence-based practice which meets the needs of women.
Objectives: This systematic review aims to identify and synthesise the best-available evidence on the meaningfulness of women's experiences of termination of pregnancy for foetal anomaly.
Methods: The review considers the qualitative studies drawing on women's experiences of termination of pregnancy for foetal anomaly including, but not limited to phenomenology, grounded theory, and ethnography. Comprehensive search strategies were developed to find both published and unpublished studies in English and Thai languages from their inception up until 2016 including EBSCOHost, CINAHL, Science Direct, Scopus, ProQuest, PsycINFO, PubMed, Web of Science, www.thairesearch.in.th and tdc.thailis.or.th/tdc (database for Thai study). Papers selected for retrieval will be assessed by two independent reviewers using a standardised critical-appraisal instrument from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI). Data are extracted from included papers using the standardised data-extraction tool from the JBI-QARI and will be analysed with meta-aggregation of JBI.
Results: This is the on-going project. However, the result will apply meta-synthesis to produce a single comprehensive set of synthesised findings that can be used as a basis for evidence-based practice including, but not limited to emotional response, adaptation process, and needs of those women with regard to termination of pregnancy for foetal anomaly.

Attachments: Abstract_Nonglak.pdf

2103
The Summer Institute for Systematic Reviews in Nutrition for global policy making

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Background: Global policy making in nutrition requires high-quality systematic reviews using state-of the art methods. The Summer Institute for Systematic Reviews in Nutrition for Global Policy Making was founded by 3 partners (WHO, Cochrane, Cornell) in 2014 to increase global capacity for synthesising evidence on nutrition and nutrition-sensitive interventions.
Objectives: The objectives are to train nutrition scientists, professionals and practitioners in the development and the use of Cochrane systematic reviews through an interactive annual training. Trainees form teams to synthesise evidence and co-author a review relevant to public health policy needs.
Methods: During 2 weeks of fulltime training, participants build an understanding of the process for global policy making in nutrition, the assessment and synthesis of evidence in nutrition, and the integration of research evidence with policies. The Institute addresses the challenges in conducting systematic reviews of nutrition interventions. The hands-on training includes co-authorship on a review that has immediate global health relevance. Training is provided on the latest Cochrane methodological advances, including GRADE, reporting standards, equity, and the incorporation of non-randomised studies of interventions, which are a key part of the evidence base in nutrition.
Results: In 2014, ’15 and ’16 there were 15, 26 and 26 participants, respectively. Participants represented all WHO regions. The 31 review topics attempted led to: 5 published Cochrane reviews, 1 published non-Cochrane review, 7 published Cochrane protocols, 2 published non-Cochrane protocols, 11 titles registered with Cochrane and 5 topics abandoned or of uncertain status.
Conclusions: The goal of the Institute to increase global capacity for creating and using systematic reviews in nutrition has had clear and measurable impact on the production of reviews in nutrition relevant to public health. It has generated global cohorts of scientists and experts who understand how to use evidence for policy making in nutrition.

2104

Theories of teaching and learning, and teaching methods used in postgraduate education in the health sciences: A scoping review

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Background: Postgraduate education has not received as much attention as undergraduate teaching in the literature in terms of methods used, innovative ideas and outcomes. Teaching at graduate level in the health-science disciplines is a complex endeavour, as higher-level knowledge, skill acquisition and decision making must be taught in a world which is seeing more complex and varied health problems. This scoping review was prompted by the reviewers’ personal experiences. Requests for help in teaching at the postgraduate level have been raised when conducting teaching workshops for faculty. Review question: Which theories of teaching and learning and/or models and / or methods of teaching are used in postgraduate teaching? Methodology: The scoping review methodology described by the Joanna Briggs Institute was implemented. This scoping review considered studies conducted in the health-science disciplines, including but not limited to medicine, nursing, occupational therapy, physiotherapy, pharmacy and dentistry. Both quasi-experimental study designs and analytical observational studies and analytical cross-sectional studies were considered for inclusion. Also considered were descriptive observational study designs. Qualitative studies, text and opinion papers were also considered. Pubmed, CINAHL, Scopus, ERIC and ProQuest Nursing and Allied Health Source and ProQuest Health and Medical Complete were searched. A data extraction table was developed.
Results: A total of 5381 papers were identified. Sixty-one papers were included in the review, the majority of which were from the medical disciplines. Most of the studies were undertaken in the USA. Surveys were the most common research method used. While a number of innovative teaching methods were described, didactic

teaching in the form of lectures was often included in the teaching of the programme. Theories of teaching and learning seldom formed the basis for the innovation. Conclusion: Theories of teaching and learning are often only alluded to, with poor explanation of application of the theory to practice .

2105

Can we use overviews to reduce research waste? An example from a population-level intervention overview

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Background: Overviews of systematic reviews (SR) are increasingly being used to signpost clinicians, guideline developers and policy makers to the best-available evidence. However, the role of overviews in identifying areas where research effort can be reduced or where further research is unnecessary has not been fully explored.
Objectives: To identify areas of research waste and evidence gaps using data from a recent overview, which synthesised population-level interventions aimed at improving the health, happiness and wellbeing of adolescents transitioning into adulthood.
Methods: A rapid overview. We systematically searched 11 electronic databases for SR published in English between Jan 2005 - March 2016. Two reviewers independently applied inclusion criteria and assessed methodological quality using the ROBIS tool. Data relating to review aim, participants, study design, interventions, setting and outcomes were extracted from SR judged to have low or unclear risk of bias (ROB). Interventions were mapped using the US National Prevention Strategy framework. Reviews synthesising the same or similar evidence were identified and overlap between SR addressing similar interventions was explored. Interventions where there were no reviews were identified.
Results: 35310 titles screened; 566 full papers considered; 256 reviews included. 150/256 reviews were judged as low or unclear ROB. Reviews were allocated to 9 themes including mental health and wellbeing; tobacco-free living; preventing drug abuse and excessive drinking; sexual and reproductive health; violence and abuse-free living; active living; healthy eating; obesity and general health. Multiple reviews, addressing the same research question, were identified particularly in topics with a physical health focus (e.g. obesity and active living). No reviews addressed the original research question. Other relevant evidence gaps included eating disorders, employment, gang violence and resilience.
Conclusions: Multiple overlapping reviews are wasteful. Overviews have an emerging role in identifying and quantifying research volume, highlighting research waste and areas where further research is (or is not) required.

2106

Randomised-controlled trials are particularly scarce and underpowered in the setting of rare diseases: Further acquisition of knowledge is needed

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Background: Randomised-controlled trials (RCTs) are particularly scarce and underpowered in the setting of rare diseases. The population available to study on Anderson-Fabry disease (AFD) is limited and in some studies long-term follow-up is not available.
Objectives: We present the results of a linear regression and a pooled analysis of proportions from cohort studies to evaluate the efficacy and safety of enzyme replacement therapy (ERT) for AFD in order to complement available information from meta-analysis of RCTs.
Methods: A literature search was performed, from inception to March 2016, using Medline, EMBASE and LILACS. Inclusion criteria were cohort studies, patients with AFD on ERT or natural history, and at least one patient-important outcome reported. The pooled proportion and the confidence interval (CI) are shown for each outcome. Simple linear regressions for composite endpoints were performed.
Results: 77 cohort studies involving 15 305 participants proved eligible. The pooled proportions were as follows: for renal complications, agalsidase alfa 15.3% [95% CI 0.048, 0.303; I2=77.2%, p=0.0005]; agalsidase beta 6% [95% CI 0.04, 0.07; I2 = not applicable]; and untreated patients 21.4% [95% CI 0.1522, 0.2835; I2=89.6%, p<0.0001]. Effect differences favoured agalsidase beta compared to untreated patients; and for cerebrovascular complications, agalsidase alfa 11.1% [95% CI 0.058, 0.179; I2 = 70.5%, p=0.0024]; agalsidase beta 3.5% [95% CI 0.024, 0.046; I2 = 0%, p = 0.4209]; and untreated patients 18.3% [95% CI 0.129, 0.245; I2 = 95% p < 0.0001]. Effect differences favoured agalsidase beta over agalsidase alfa or untreated patients. A linear regression showed that Fabry patients receiving agalsidase alfa are more likely to have higher rates of composite endpoints compared to those receiving agalsidase beta.
Conclusions: For rare diseases, further acquisition of knowledge needs to rely on observational studies. Accordingly due to this complementary analysis we concluded that agalsidase beta is associated to a significantly lower incidence of complications than no ERT, and agalsidase alfa.

Attachments: Figure 3. Comparison of the plotted proportional meta-analysis, according to ERT regimens and untreated patients for renal complications.jpg, Figure 5. Comparison of the plotted proportional meta-analysis, according to ERT regimens and untreated patients, for cerebrovascular complications.jpg, Figure 6. Progression of composite endpoints, according to ERT regimens throughout the years.jpg

2107

Challenges of conducting a systematic review on the prevalence of rare diseases

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Background: Few systematic reviews (SRs) exist on prevalence of rare diseases. Conducting one is valuable as it provides an accurate and current assessment of prevalence of the condition; allows comparisons across countries; and, highlights areas of high or low prevalence. It enables targeting of resources and treatment and allows planning and prioritisation of future research. Objective: To investigate challenges of conducting a SR on prevalence of rare diseases and make recommendations for future research. Method: Comparisons were made between the methodologies applied in 4 SRs of rare diseases: Duchene Muscular Dystrophy (DMD), Phenylketonuria (PKU), Morquio A syndrome and Neuronal ceroid lipofuscinosis type 2 (CLN2 disease). Outcomes were defining the research question, information retrieval, screening, data extraction and data synthesis.
Results: When defining inclusion criteria, investigate recommendations for diagnoses. In the absence of guidelines consider clinical input. For information retrieval, consider terms for disease classification and historical nomenclature. Additional sources include rare-disease websites, patient databases, clinical experts and patient groups. Exercise caution at title and abstract screening as rare diseases are often reported under umbrella terms. When extracting data distinguish between types of prevalence and, beware, as prevalence is often mis-reported as incidence. Synthesis is typically narrative. Prevalence type, historical nomenclature and diagnosis method are useful to categorise data. Conclusion: Similarities exist between SRs of prevalence of rare diseases but individual conditions present unique challenges. A good knowledge of disease classification and historical nomenclature is essential for effective searching and screening. Whether diagnosis is simple or complex, it should be clearly and

fully reported, data extracted and compared with other studies reporting the same outcome. Definitions of prevalence should be clearly extracted and compared to similar studies. Limitations surrounding individual studies and their effect on prevalence should be carefully considered.

2108

A qualitative systematic review of the experiences and support needs of newly graduated nurses during community service in South Africa

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Background: South Africa's Community service nurses (CSN) programme requires nurses to serve in rural and undeserved areas. The programme is very relevant from developmental perspectives because it marks the first work experience for many nurses after graduation. It is also one of the key pillars to ensure the health provision in rural areas in South Africa. Still, systematic analysis about nurses' experience is lacking.
Objectives: To review studies describing the experiences and support needs of newly graduated nurses during community service in South Africa; critique study research methods, describe outcomes, and make recommendations for future research and practice. In doing so recommended outcomes and support will be given to future community service nurses in South Africa.
Methods: The systematic review methods included searching, sifting, abstraction and quality assessment of relevant studies by two reviewers. Studies were evaluated for sampling methods design, threats to validity and outcomes. Data source: Research studies from the inception of community service in South Africa (1991-2016), from Academic search complete, CINAHL, Cochrane, Pubmed, SABINET ScienceDirect, Scopus, Nexus and unpublished articles through Google Scholar.
Results: Ten studies met the inclusion criteria and were analysed in detail. The nurses' experience can be characterised by these key themes: the positive experience of community service, the conflict of role change, integration of theory to practice, environmental challenges or overcrowding and staff shortages and the need for professional development. Reviewed studies generally had small samples and poor design.
Conclusions: Though the analysis identified positive experience(CSN found working with patient and family satisfying, they gained from being exposed to different institutional settings and lots more), the challenges prevailed and point to the need of more systematic support mechanisms during the service. In addition, more and more rigorous research is required to corroborate the emerging insights developed by this review.

2110

Minimal important difference for the EQ-5D and impact on decision making in a clinical guideline

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Background: Minimal important differences (MIDs) are used in guidelines to determine the clinical importance of effects and to aid decision making alongside quality of the evidence, trade-offs between benefits and harms, current context and equality considerations. The EQ-5D is a preference based health-related quality-of-life measure for which there is no agreed MID.
Objectives: Preliminary work undertaken during development of a NICE guideline explored the variation in opinions and methods used to apply MIDs for the EQ-5D. This research furthers that work by assessing the impact the choice of MID had on the recommendations made and the effect alternative methods may have had, with the overall objective of informing future guideline-development methodology.
Methods: Evidence from the EQ-5D in one clinical guideline (NICE NG59) was reviewed to determine whether the

clinical importance rating and/or recommendations may have differed if alternative methodologies had been employed. The methods that were compared were; 1) committee determined MID of 0.03 on a 0-1 scale; 2) considering any positive change in the EQ-5D as clinically important; 3) only assessing the EQ-5D as an economic outcome; and, 4) GRADE default values for imprecision and clinical importance.
Results: Data were available for 43 comparisons within 16 review questions. Use of the GRADE default value resulted in 26 changes to clinical importance when compared to a committee determined MID. Considering any change to be clinically important resulted in only 5 changes in this decision. The key finding was that irrespective of the methodological approach applied, the recommendations that resulted did not change.
Conclusions: The choice of criteria used to determine clinical importance of a single outcome within a review does not appear to impact on the recommendation made. This is likely due in part to the fact that decision making within a guideline considers the whole body of evidence, including other critical and important outcomes, quality of the evidence, cost-effectiveness, safety and tolerability, patient acceptability, current context and equality issues, amongst other considerations.

2111
Inter-rater agreement and time to complete the new Cochrane Risk-of-Bias tool (RoB 2.0)

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Background: The RoB 2.0 tool, a revised tool to assess risk of bias in randomised trials (RCTs) was piloted during 2016 and officially released at the 2016 Cochrane Colloquium.
Objectives: To assess the Inter-rater agreement (IRR) between raters, time to retrieve protocols and to complete the RoB 2.0 tool.
Methods: We used a convenience sample of 20 individually parallel RCTs included in 2 Cochrane reviews in the drug and alcohol-addiction field. Nine studies compared pharmacological intervention versus placebo and 11 compared psychosocial intervention versus no intervention or usual care. Two raters with medium and high expertise in risk-of-bias assessment were involved. For each relevant outcome we used the Cohen's weighted κ to assess the IRR for signaling questions (SQ), individual domain judgments (DJ) and overall judgment (OJ). We classified agreement as poor (≤0.00), slight (0.01-0.20), fair (0.21-0.40), moderate (0.41-0.60), substantial (0.61-0.80), almost perfect (0.81-1.00). Time to complete the tool was calculated as the mean time spent in minutes by each rater for each relevant outcome. Time to search and acquire the study protocol was calculated as the mean time spent in minutes for each trial.
Results: Preliminary results of the first 6 outcomes from 4 trials are provided. Randomisation process: SQ1.1: k0.57, SQ1.2: k0.57, SQ1.3: k0.18; DJ1: k0.08 Deviations from intended interventions: SQ2.1: k0.45, SQ2.2: k0.45, SQ2.3: k-0.36, SQ2.4: k0, SQ2.5: k0, DJ2: k-0.36 Missing outcome data: SQ3.1: k0.57, SQ3.2: k-0.13, SQ3.3: k0.20, DJ3: k1 Measurement of the outcome: SQ4.1: k0.18, SQ4.2: k0.36, DJ4: k0.67 Selection of the reported results: SQ5.1: k-1, SQ5.2k-1, DJ5: K0 Overall judgment: K0 Mean time to complete the tool was 34.2 minutes; mean time to search for protocols was 20 minutes.
Conclusions: Preliminary results showed an agreement from poor to moderate for signaling questions, from slight to almost perfect for judgments on individual domains and a poor agreement for overall judgments.

2112
Purposively sampling for qualitative evidence syntheses: Methodological lessons from a synthesis on vaccination communication

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Background: In a qualitative evidence synthesis (QES), too much data due to a very large number of included studies can undermine thorough analysis. In order to limit the number of included studies included in a QES on vaccination communication, we developed and applied a sampling framework to studies that met our inclusion criteria.
Objectives: To discuss the development and application/strengths and weaknesses of a sampling framework for a QES on vaccination communication.
Methods: We mapped eligible studies by extracting key information from each study, for example: country, study setting, vaccine, data richness, and study objectives. The final sampling frame included the following three steps: 1. Include studies set in low- and middle-income (LMIC) settings 2. Include studies scoring a three or more on a scale of data richness developed for this synthesis 3. Include studies where the study objectives closely match the synthesis objectives
Results: Seventy studies were eligible for inclusion in the review. Thirty-eight studies were sampled for inclusion in the synthesis. Nine studies were sampled in round one from LMIC contexts. These studies contributed to, on average, the least number of findings in the final synthesis. Twenty-four studies were sampled in round two on the basis of data richness. These studies mostly contributed to a larger number of findings. The five studies sampled in round three that, from the studies remaining at that stage, most closely matched the synthesis objectives contributed on average to a large number of findings.
Conclusions: Our approach to purposive sampling allowed us to achieve a wider geographic spread of articles and to increase the number of included studies that had rich data and closely matched the synthesis objective. It is possible that we may have overlooked articles that did not meet our sampling criteria but would have contributed to the synthesis. For example, two studies on migration and access to health services did not meet the sampling criteria but might have contributed to strengthening at least one finding. Ways of cross-checking for under-represented themes are needed.

2113
Towards evidence summit in reducing maternal and neonatal mortality in Indonesia

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Background: The current state of evidence on determinants, implementation approaches, and research addressing health system issues, relevant to maternal and neonatal mortality (MNM) in Indonesia, is unknown. Whereas, the clear understanding of the existing evidence is essential to inform policies and to accelerate progress in reducing the MNM in Indonesia.
Objectives: To synthesise all existing evidence and identify evidence gaps related to MNM.
Methods: A conceptual framework of the magnitude of the problem, and the methodological guideline for systematic review (SR) approach were discussed among core technical group consisting of panel of content and methodological experts. 21 focal questions (FQ) in 6 topic areas, i.e. quality of care, referral system, health financing, local governance systems, evidence utilisation, and gender equity, were developed. Maternal, neonatal, and methodological experts from all over Indonesia, were selected to form evidence review teams (ERT) to conduct the SR for each FQ. ERT developed the protocol to guide through evidence gathering and selection, quality assessment, data extraction, and evidence synthesis. The evidence was gathered from bibliographic

sources, using the predefined search strategy. Hand searching for dissertations/theses, proceedings, project reports from the relevant institutions was also performed. Additionally, the relevant literatures identified by experts were collected through call for evidence. The retrieved literature was screened based on the pre-specified eligibility criteria. The risk of bias for each eligible literature will be performed using quality assessment tools from Effective Public Health Practice Project (EPHPP). The data on study characteristics and results will be extracted and reported. The meta-analyses will be done, if no heterogeneity is identified; otherwise we will synthesise the results narratively. The quality of evidence will be reported and became one of the basis for drawing a conclusion and recommendation. Afterwards, the qualitative SR will be conducted and the findings will be synthesised using thematic analyses and be used for enhancing the recommendation.

2114

The ICTRP Search Portal as an information source for systematic reviews – current problems and recommendations on how to deal with them

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Background: Searching clinical trial registries is recommended as a standard component of information retrieval for systematic reviews. In this context, as a meta-registry containing data from 17 (national) registries, the International Clinical Trials Registry Platform (ICTRP) Search Portal of the World Health Organization is a potentially valuable information source. Discussion: The use of the ICTRP Search Portal is affected by various problems, which can be classified as follows: 1) limited search functions; 2) inconsistent implementation of search functions in the standard and advanced search interfaces; 3) problems caused by linking related records; 4) partly incomplete data pool; 5) error messages during complex search queries, as well as other inconsistencies; and, 6) provision of insufficient information to users on changes to search interfaces and functions. The presentation will describe the various problems and give advice on how to deal with them in practice.
Conclusions: The ICTRP Search Portal is faced with structural problems that make it difficult to conduct a comprehensive search. We recommend dispensing with the advanced search function at the moment as the sensitivity achieved is insufficient. As long as the problems described persist, we also recommend additional searches in other registries such as ClinicalTrials.gov or EU-CTR.

2115

Co-publication of systematic reviews from the Cochrane Breast Cancer Group

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Background: To ensure wide dissemination and high impact of review findings, Cochrane recognises that there may be instances when it is advantageous to enable co-publication of Cochrane systematic reviews. From 2010, co-publication must be formalised with publication agreements between the editor of the journal, the Cochrane Review Group, Cochrane Editor-in-Chief and Wiley, in line with the Editorial and Publishing Policy Resource, and is the exception rather than the rule.
Objectives: To report: 1) the frequency of co-publication of systematic reviews from the Cochrane Breast Cancer Group; and, 2) adherence to publishing policy in regards to co-publication.
Methods: Active reviews and protocols from the Cochrane Breast Cancer Group published from January 2010 were identified. Using the review title and author names, PubMed database and Google Scholar were searched to identify possible co-publications. Previous applications for co-publication were sought from the Managing Editor. Each possible co-publication was compared to the published Cochrane review/protocol using a pre-tested data-

collection form.
Results: Of 63 active reviews and protocols published since 2010, 7.9% (3 reviews, 2 protocols) had co-publications identified. Of those co-publications, 3 reviews (1 review, 2 protocols) were published before the Cochrane review. Adherence to publishing policy was low with only one review obtaining approval for co-publication and fulfilling manual policy requirements for co-publication. 4 of 5 reviews were published in journals with a lower impact factor (range: 2.74-3.15) than the Cochrane Database of Systematic Reviews.
Conclusions: There was limited evidence of co-publication of systematic reviews or protocols from the Cochrane Breast Cancer Review group. Among those that did have co-publications, the majority did not adhere to publishing policy and did not obtain approval prior to co-publication. Although the Title Registration form states the Cochrane publishing policy, greater awareness of procedures for co-publication is needed after protocol-publication stage to ensure corresponding Cochrane reviews are published before other co-publications.

2116
Unnecessary pooling of heterogeneous data: Analysis of a sample of systematic reviews

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Background: A common criticism of systematic reviews (SRs) is that they carry out statistical pooling without adequately considering clinical heterogeneity. Findings based on such estimates could be misleading as readers often consider the pooled summary estimates and ignore any underlying heterogeneity.
Objectives: To analyse the systematic reviews in KSR Evidence (a database of systematic reviews) which were assessed to be at high risk of bias (RoB) because pooled analysis was not appropriate due to presence of clinical heterogeneity.
Methods: All SRs in the database are critically appraised using the validated Risk of Bias in Systematic Reviews (ROBIS) tool, specifically designed to assess RoB in SRs and are checked for quality by a second independent reviewer. We analysed a sample of appraisals independently checked by 10 experienced reviewers. We identified reviews judged at high RoB for the synthesis as the authors pooled the studies despite of the clinical heterogeneity across the studies.
Results: The database has >30,000 SRs, as identified by our searches to date. This analysis includes a sample of 651 SR critical appraisals (checked independently) of which 49% (321) were judged at high RoB on ROBIS domain 4 (Synthesis and Findings). Pooling was judged to be inappropriate, due to the presence of clinical heterogeneity, in 17.5% (56/321) of the SRs judged to be at high RoB. Sources of heterogeneity across the 56 SRs included pooling of different study designs, time points, scales used for measuring outcomes and interventions/comparators with different dose regimens, etc. The majority of these SRs (45/56) also showed statistical evidence of heterogeneity.
Conclusions: Consideration of clinical heterogeneity before pooling studies is crucial. A large number of studies ignore clinical heterogeneity and report summary estimates which may mask clinically important variations in effectiveness. SRs should not conduct pooled analysis where inappropriate and further improve reporting of synthesis.

2117
Systematic review of cure rates in incontinence – role of clinical experts

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Background: We performed a systematic review of cure and success rates of treating incontinence in people with

urinary or faecal incontinence.
Objectives: We were interested in cure and success rates of interventions and subsequent dependence on containment products, not in the relative effectiveness of interventions. Therefore, we used cure and success rates from individual study arms. We planned to calculate average cure and success rates. Methods and
Results: For comparability of cure rates across studies it was important that populations, outcomes and follow-up durations were similar. Therefore we reported cure rates by subgroup (people with stress urinary incontinence (SUI), urgency urinary incontinence (UUI) and mixed urinary incontinence (MUI); faecal incontinence (FI); people with disabilities or neurological diseases; and, elderly or cognitively impaired). We focused on 'cure' (no leakage), as this was the most unambiguous outcome. However, for faecal incontinence 'cure' is often not reported; therefore, success rates were collected together with a full description of the outcome reported. Only when outcome definitions were similar enough was combining results contemplated. Finally, outcomes were reported with follow-up ranging from 12 weeks to 10 years. Therefore, results were grouped by follow-up period (>12 weeks to <4.5 months, ≥4.5 months to <9 months, ≥9 to <15 months, ≥15 months to <21 months, ≥21 months to <2.5 years, ≥2.5 years to <4 years, and ≥4 years). The project was performed in close collaboration with a group of 9 clinical specialists. They played a vital role in defining population subgroups, outcomes and in identifying relevant interventions. The group also advised about whether or not combining results was feasible. The results table for people with urgency urinary incontinence was as follows (Table 1). Similar tables were constructed for the other subgroups.
Conclusions: In the end we decided to present results by population subgroup, outcome, intervention and follow-up period, without combining any of the results, as the studies were too heterogeneous. When judging heterogeneity, input from clinical experts was essential.

Attachments: R Riemsma Table 1.pdf

2118
Evaluation of a novel citation-based search method vs. Ottawa/RAND Search Method for Prioritising systematic reviews for update

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Background: Although systematic reviews (SRs) should be updated as new research is published, most organisations cannot update every SR. The Agency for Healthcare Research and Quality (AHRQ) Scientific Resource Center (SRC) assesses the currency of AHRQ SRs to determine priority for update. The SRC uses a gap literature search method based on the work of University of Ottawa and the RAND Corporation (Ottawa/RAND method). Citation-based search methods have been proposed as an alternative way to efficiently identify articles that meet original SR criteria. The SRC developed a novel citation-based search method (SRC method) that searches for articles that either cite or use the same subject headings as the original SR's included articles. Objective: To evaluate if the SRC method is more efficient than the Ottawa/RAND method at identifying articles that meet original SR criteria.
Methods: We conducted gap literature searches using the SRC method and Ottawa/RAND method for two SRs. We determined the total number of reviewed articles and applied the original SRs inclusion criteria to determine the inclusion percentage (included articles/articles reviewed), randomised-controlled trial (RCT) inclusion percentage (RCTs/ included articles), and number of 'unique' included articles identified through one method but not the other.
Results: Fewer total articles were identified using the SRC method than the Ottawa/RAND method for one review, but more were identified for the other review (SR#1: 96 vs. 111 articles; SR#2: 335 vs. 253 articles). The SRC method resulted in a greater inclusion percentage for both reviews (SR#1: 24% vs. 14%; SR#2: 7% vs. 3%). The SRC method resulted in a greater RCT inclusion percentage for one review (SR#1: 87% vs. 81%), and an equal RCT inclusion percentage for the other review (SR#2:100%) since its inclusion criteria stipulated that only RCTs be included. For both reviews, the SRC method identified more 'unique' included articles (SR#1: 14 vs. 7 articles; SR#2: 20 vs. 2 articles). Conclusion: The SRC method is more efficient than the Ottawa/RAND method at identifying articles

meeting original SR inclusion criteria.

2119

The feasibility of a search filter for non-drug interventions

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Background: Systematic reviews should include search strategies which aim to identify as many relevant papers as possible. However, searching for information on adverse effects is challenging, not least because adverse effects are often secondary or even tertiary outcomes and the inconsistent terminology used. Research indicates that authors and indexers are increasing including terms for adverse drug effects in their titles or abstracts or indexing of bibliographic records in databases such as MEDLINE and EMBASE. However, it is not clear if this is the same for studies with non-drug adverse effects data.
Objectives: To assess the feasibility of using adverse-effects terms when searching electronic databases to retrieve papers that report adverse effects data of non-drug interventions.
Methods: A collection of papers that reported data on the frequency of adverse effects of non-drug interventions was sought from the included studies of systematic review of adverse effects. Each included study was then analysed to ascertain whether the corresponding records in MEDLINE and EMBASE included adverse effects terms in the title, abstract or indexing. The results were compared to research which has assessed adverse-effects terms in the title, abstract or indexing of studies on adverse drug effects.
Results: From 9129 DARE abstracts screened, 30 reviews evaluating adverse effects of non-drug interventions met our inclusion criteria. 635 unique papers (358 from 19 surgical intervention reviews and 277 from 11 other non-drug reviews) were included in our analysis. Records relating to surgical interventions were more likely to contain adverse-effects terms in the title, abstract or indexing than records relating to non-surgical interventions. In both MEDLINE and EMBASE over 90% of records for surgical interventions contained adverse-effects terms whereas less than two-thirds of records for non-surgical interventions contained adverse-effects terms.
Conclusions: While a generic non-drug adverse-effect search filter or suggested terms may not yet be feasible, it may be feasible to have suggested search terms for the adverse effects of surgical interventions.

2120

Using more than one systematic review as evidence base for a guideline recommendation: Updating the National Disease Management Guideline (NDMG) Asthma

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Background: The update of the NDMG Asthma is based on systematic reviews (SR). Methodological standards for SR require a documentation of excluded studies and reason for exclusion. This information is essential for the comparison of different SR for one research question.
Objectives: We aimed to compare SR on therapy of asthma with macrolides. Furthermore, we analysed the reporting quality on 'study exclusion' of all included systematic reviews on the diagnosis and treatment of asthma.
Methods: SR on the diagnosis and treatment of asthma between 01/01/2013 and 02/26/2016 were systematically searched in MEDLINE via Pubmed and in the Cochrane Database of Systematic Reviews. Identified reviews were screened in a 2-step procedure and only those scoring at least 6 points at the AMSTAR measurement tool were included. The SR were allocated to the research questions of the guideline. If >1 SR was allocated to one research question, such as for macrolide therapy, results were analySed in detail.

Results: We identified 3 SR on macrolide therapy in patients with asthma. For the outcome 'quality of life', 4 of altogether 6 studies were used in all 3 SR. Two SR found no difference in quality of life, while 1 found a statistically significant improvement. Comparing the body of evidence to explain the contradiction was only partly possible as only 1 SR reported on excluded studies and reasons for exclusion. Hitherto a total of 124 SR were included as the evidence base for the diagnosis and treatment of asthma. 42% (n=52) reported on excluded studies and reasons for exclusion, 77% (n=40) of those were Cochrane reviews.
Conclusions: Reporting excluded studies and reasons for exclusion is essential for the comparison of different SR. Unfortunately, less than half of the included SR reported on excluded studies. A better reporting of SR would help to increase their value for guideline developing groups and thus strengthen the link between evidence synthesis and guideline development.

2121

Non-communicable diseases in the Eastern Mediterranean Region (EMR): An overview of reviews

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Background: In the Eastern Mediterranean Region (EMR), more than 1.7 million deaths occur yearly from the four main types of non-communicable diseases (NCDs): cardiovascular diseases, cancer, diabetes and chronic respiratory diseases. The research productivity and quality in the EMR is low with critical deficits in different areas.
Objectives: This study aims to identify, summarise and synthesise systematic reviews (SRs) and/or meta-analysis addressing NCDs and their risk factors in the EMR in order to critically appraise the research productivity and quality and to identify which associations are being investigated between risk factors and outcomes.
Methods: We searched Medline Ovid in April 2016, Cochrane Central in May 2016 and Epistemonikos in May 2016 to find the relevant SRs published between1996-2015. Screening and data abstraction were done independently and in duplicate before using AMSTAR for the quality assessment.
Results: We identified 2439 SRs and the final number included in the qualitative analysis is 105. The majority of the studies were conducted by one country, and Iran had the highest number of publications. The number of SRs in the EMR has been steadily increasing throughout the years, however, most of them (85%) were of low quality, and only recently has there been the emergence of a few middle- and high-quality SRs. SRs in which there was a collaboration with a non-EMR corresponding author tended to be of better quality. The research focus and gaps are clearly shown in the gap map where cardiovascular diseases were the most common addressed outcome (43%), smoking was the most common addressed risk factor (21%) and diabetes was highly addressed (27%).
Conclusions: Quality improvement of the SRs addressing NCDs in the EMR is essential for the development of better policies and practices. Additionally, the gaps identified should help guide future investigations in the EMR according to the burden of disease.

2122

Putting the puzzle together: Accessing raw quality-of-life data from clinical study reports for use in evidence synthesis

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Background: Generic health-related quality of life (HRQoL) instruments measure the overall well-being of people as per their own perspective. Two of the most widely used of these are the Short-Form-36 (SF-36) and the preference-based utility measure EuroQol-5D (EQ-5D). As only about half of all studies are subsequently published

and a review of 101 trials found that HRQoL outcomes were the least reported on in journal publications, we undertook this study.
Objectives: The HRQoL assessments in industry sponsored antidepressant trials have almost universally been left unpublished and so we undertook an evidence synthesis of raw SF-36 and EQ-5D data from clinical study reports (CSRs) of these trials.
Methods: We received CSRs from regulators and all RCTs with either SF-36 or EQ-5D as outcomes were selected and all relevant data were extracted. The concerned pharmaceutical companies Eli Lilly, Pfizer and GlaxoSmithKline (GSK) were contacted for the journal publications of these trials for comparison and for the missing data.
Results:15 trials used SF-36 and EQ-5D as outcomes corresponding to 19 015 pages of data from 8 trials of duloxetine, six trials of paroxetine and 1 of setraline. One other sertaline trial and 4 venlafaxine trials used unnamed HRQoL instruments and no results were available. Four of the duloxetine, 2 of the paroxetine and the sertraline trial from the included trials either were missing or had incomplete HRQoL results. All companies were contacted several times. Eli Lilly submitted the articles almost immediately but no additional data. Pfizer eventually replied stating they would send the articles and missing results but we received neither. We never received any response from GSK. We undertook the evidence synthesis with the limited data we had.
Conclusions: Overall HRQoL did not show significant improvement compared to placebo and there was selective reporting in articles and in CSRs.

Attachments: Flow Chart.jpg

2123
TaskExchange: Online collaboration in guideline and review production

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Background: Efficient production of guidelines and systematic reviews relies on getting people with the right skills and availability completing a wide range of tasks at just the right time. TaskExchange (taskexchange.cochrane.org) is an online platform that supports collaboration within the evidence community. The aim of TaskExchange is to bring together people who need help with producing and disseminating guidelines and reviews with people who have the time and skills to help; facilitating efficient production of high-quality, relevant, up-to-date evidence.
Objectives: This paper describes the development, growth and future plans for TaskExchange, an online platform facilitating collaboration in health-evidence synthesis.
Methods: Development of TaskExchange was initially undertaken as part of Cochrane's Project Transform. Recently the Guidelines International Network (GIN) has become a partner in TaskExchange enabling us to extend the use of TaskExchange to cover both guideline and review-related tasks.
Results: TaskExchange is an openly accessible online platform. Users sign in and create a profile, browse or search for relevant tasks, respond to tasks or post new tasks. Users can also sign up to be notified of new relevant tasks. As of February 2017 TaskExchange has almost 300 tasks and approaching 1000 users, of whom approximately 40% are from outside Cochrane.
Conclusions: By bringing together the global evidence community, including Cochrane and GIN members, and enabling collaboration, TaskExchange has the potential to enable efficient production and use of high-quality, relevant, up-to-date evidence.

2124
Project on a Framework for Rating Evidence in Public Health (PRECEPT): testing the framework in multiple systematic reviews

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Background: The Project on a Framework for Rating Evidence in Public Health (PRECEPT) is a collaboration between European public health agencies and academic institutions. It aims at defining a framework for evaluating and grading evidence in the field of infectious disease prevention and control. PRECEPT proposes a 4-step approach for the conduct of evidence assessments, comprising question framing (step 1), conduct of systematic reviews (step 2), evidence assessment (step 3) and preparation of evidence summaries (step 4).
Objectives: To test the PRECEPT framework in 2 systematic reviews/evidence assessments in the field of infectious disease prevention.
Methods: We used two case studies to test PRECEPT: 1) Prognostic value of screening for colonisation by gram-negative bacteria for the prediction of neonatal sepsis; and, 2) Effectiveness and safety of influenza vaccination during pregnancy. Following the PRECEPT work flow, we performed systematic reviews, assessed risk of bias and applied GRADE (Grading of Recommendations Assessment, Development and Evaluation).
Results: For case study 1, the systematic review identified 9 studies on sensitivity/specificity of screening for neonatal colonisation. We used QUADAS-2 (Quality Assessment of Diagnostic Accuracy Studies) to assess risk of bias which was high in all studies. For case study 2, we tested the use existing systematic reviews for the development of new evidence assessments. We identified 4 systematic reviews on the effectiveness and safety of influenza vaccination during pregnancy. AMSTAR (Assessment of multiple systematic reviews) was used to assess their methodological quality, resulting in summary scores of 9-11. GRADE certainty in the evidence was high for efficacy of influenza vaccination during pregnancy against laboratory-confirmed influenza.
Conclusions: Testing PRECEPT showed the suitability of the framework for the development of evidence assessment in infectious disease prevention. However, we also identified areas for further refinement, including the need for detailed guidance on the use of existing systematic reviews and guidance on the how to proceed with prognostic studies.

2125

Systematic reviews for understanding: A worked example of Boell's hermeneutic methodology

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Background: Wittgenstein distinguished between questions that require data and those that require understanding. Systematic review methodology has focused almost exclusively on the former. But complex policy topics are sometimes characterised by a surfeit of data, synthesised in a succession of systematic reviews and meta-analyses that fail to provide the hoped-for clarity. Boell, et al. (in the field of information systems) developed a new methodology, hermeneutic review, which seeks to generate understanding by close reading and iterative synthesis. Objective: 1. To make sense of the literature on telehealth in heart failure. 2. To explain why RCTs have been slow to recruit and produced conflicting findings, and why real-world roll-out has been slow. Method: Through database searching and citation tracking, we identified 7 systematic reviews of systematic reviews, 32 systematic reviews (including 17 meta-analyses and 8 qualitative reviews); six mega-trials and over 60 additional relevant empirical studies and commentaries. We synthesised these using hermeneutic methodology, which emphasises close reading of documents and iterative generation of an account that makes sense of the topic. Main findings: Our review revealed several tensions: between 'textbook' heart failure and multiple comorbidities; between basic and intensive telehealth; between 'activated', well-supported patients and vulnerable, unsupported ones; between 'cold telehealth' (technology-mediated biomarker monitoring enabling semi-automated adjustment of medication) and 'warm telehealth' (relationship-based care delivered by a known clinician via telephone or video consultation); and between fixed and agile care programmes. Conclusion: Conventional systematic reviews (whose goal is synthesising data) can be usefully supplement by hermeneutic reviews (whose goal is deepening understanding). The limited adoption of telehealth for heart failure has complex

and inter-related clinical, professional and institutional causes. These are unlikely to be resolved by undertaking new RCTs or meta-analyses of telehealth-on versus telehealth-off. We offer suggestions for new avenues of research.

2126

Are individual/small group interventions in math more effective than class/school level interventions? A meta-analysis of What Works Clearinghouse reviews

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Background: K-12 interventions are often delivered to targeted students in groups of various sizes – individuals, small groups, the entire class or school. A systematic review of how does mode of delivery affect the effectiveness of interventions in Math has not been conducted (Bloom, 1984; for Reading, Slavin et al. 2009). What Works Clearinghouse (WWC) has recently made available to the public coded database of reviewed evaluation studies. One of the study properties included is delivery of intervention at individual, small group, classroom and school levels.
Objectives: 1. Address the following research hypothesis: In the content area of Math, are interventions that target individual/small groups more effective than interventions that serve class or larger groups? 2. Discuss the advantages and challenges of using the WWC database for works in meta-analysis.
Methods: To address the research question, we conduct a meta-analysis on the recently released WWC database on reviewed studies in the area of math, and compare the effect sizes of K-12 interventions serving individual/small groups with interventions that serve at the class or school level. The analysis data set consists of 226 effect sizes and 67 reviewed studies. The comparison is made in a random-effect model by meta-regression technique. Our study uses the robust variance estimation procedure to adjust for the within study dependencies among effect sizes (Hedges et al. 2010; Tanner-Smith et al. 2014). Challenges encountered when using the WWC database for this analysis will also be described.
Results: Our results show, that after controlling for sample size and other variables, individual/small group interventions are more effective than interventions targeting classrooms and schools.
Conclusions: Evidence suggests that individual/small group interventions are better in producing positive math outcomes than interventions that target larger groups. We will also outline the pros and cons, tips and recommendations when using the WWC publicly available data for meta-analysis.

2127

Quality scoring of diagnostic articles for the development of evidence-based practice guidelines

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Background: Well-designed diagnostic studies are necessary for determining evidence to support a diagnostic approach. As quality varies widely, a method is needed to separate higher from lower quality.
Objectives: To quantify the number of diagnosis guidelines listed in the National Guideline Clearinghouse (NGC) that utilised a rating system to determine the quality of evidence and present a quantitative method to assess the quality of diagnostic studies.
Methods: We reviewed the guideline matrix used by the NGC, which allowed for quantification of methods to assess the quality of the evidence.
Results: Of the diagnostic guidelines (N=678) in the NGC, 81.7% (N=554) use weighting according to a rating

scheme (scheme given) to assess the quality of the evidence. However, 1.8% (N=12) use a rating scheme but do not provide further details; 12.3% (N=84) use expert consensus or a subjective review and 4.2% (N=28) do not provide methods regarding analysing the quality of evidence. Assessment of diagnostic guidelines (scheme given) published in 2016 that systematically reviewed the literature (N=34) showed that only 2.9% (N=1) actually use a quantitative scheme. A quantitative scoring method used by the American College of Occupational and Environmental Medicine emphasises the comparative test being studied. Another criterion is data to calculate test specificity and sensitivity. Studies that compare the new test to an established Gold Standard test are evaluated first. However, many diagnostic studies have no established Gold Standard so a variety of comparative tests are often used. The scoring metric considers 11 criteria with each criterion being rated at 0, 0.5, or 1.0. A study is considered low quality if the composite rating was ≤3.5, moderate if rated 4-7.5, and high if rated 8-11. This system results in a testable study score and reproducible guidelines methods.
Conclusions: Properly grading study quality and rating overall strength of evidence can produce improved levels of confidence about the scientific evidence underlying diagnostic guidelines.

2128
Should guideline developers include clinicaltrials.gov in exhaustive literature reviews?

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Background: Prior research suggests there may be a need for reviewing clinicaltrials.gov for evidence. Subsequent reporting of results from trials on clinicaltrials.gov is between 40-50% with results published in peer-reviewed journals. This raises concern for reporting biases. Objective: To determine: 1) if review of clinicaltrials.gov will result in the same quality evidence (randomised-controlled trials (RCTs)) found as compared to conducting traditional literature reviews; and, 2) if ClinicalTrials.gov searches will populate evidence not published in peer-reviewed journals and should therefore be reviewed by guideline developers.
Methods: We focused our comparison on the third edition of the hip and groin guidelines developed by the American College of Occupational and Environmental Medicine (ACOEM) in 2013. We first replicated our original literature searches on clinicaltrials.gov for the following treatments: herbal preparations (HP), acupuncture, low-level laser therapy (LLT), and magnetic stimulation (MS). The same search terms and parameters were used as in 2013. We then reviewed trials registered on clinicaltrials.gov for each of the four treatments that were not published in a peer-reviewed journal.
Results: Our original search for ACOEM's 3rd edition included a total of 28 RCTs for all 4 treatments (N=19 HP, N=9 acupuncture, N=0 LLT, N=0 MS). We applied the same search parameters as our original searches but were unable to locate any of these trials on clinicaltrials.gov. Replicating the searches for all four treatments on clinicaltrials.gov resulted in 26 registered trials (N=7 HP, N=15 acupuncture, N=0 LLT, N=4 MS) out of which 82.1% did not have any results published in a peer-reviewed journal. Conclusion: None of our original evidence was found on clinicaltrials.gov. More alarmingly, we found a total of 26 registered trials on clinicaltrials.gov out of which 82.1% did not have results published in a peer-reviewed journal. Given the stark discrepancies between our traditional searches and searches on clinicaltrials.gov we believe there is a need to include clinicaltrials.gov in our search methodology.

2129
The use of Cochrane reviews in an African first-aid and prevention guideline for lay people

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Background: The Belgian Red Cross develops evidence-based first aid and prevention guidelines for lay people, not only for the Belgian context, but also for other countries, such as India, Nepal and sub-Saharan Africa. A first-aid and prevention manual for sub-Saharan Africa was developed in 2011 and updated in 2016.
Objectives: Cochrane intends to make healthcare decisions better by summarising the best evidence from research into Cochrane reviews, to help informed decision making. The aim of this study was to investigate whether Cochrane reviews are useful for the development of African first-aid and prevention guidelines for lay people.
Methods: A total of 114 PICO questions for 20 topics were addressed for the update of the African first-aid and prevention guidelines. Fifty of these questions (44%) were context-specific interventions for sub-Saharan Africa (e.g. honey as treatment for burns). Search strategies were developed for MEDLINE, Embase and the Cochrane Library, to find systematic reviews and individual studies.
Results: Evidence was found for 86 PICOs (75%), of which 29 PICOs (34%, 9 PICOs on first aid and 20 on prevention) were supported by Cochrane systematic reviews (SRs). Topics best supported by Cochrane SRs were 'injuries to muscles, joints or limbs' (71% of the PICOs for this topic were supported by a Cochrane review), 'diarrhoea' (45%) and 'emergency childbirth' (43%). Nineteen of the 29 PICOs were up-to-date (less than 5 years old) or are considered stable, for 10 PICOs the Cochrane review was outdated (more than 5 years old). For 9 of the 20 topics, no Cochrane SRs were available. These topics include 'stroke', 'choking', 'chest discomfort', 'severe bleeding and shock', 'stings and bites', 'eye injuries', 'fainting', 'fits' and 'rash'.
Conclusions: Although some topics are fairly covered by Cochrane SRs, we must conclude that for guidelines aimed at lay people there is still a large gap for which no Cochrane SRs are available, or Cochrane SRs are out-of-date. A closer collaboration between Cochrane review groups and guideline developers would be relevant in order to enhance uptake of Cochrane SRs into practice.

2130

Definition, disclosure and management of conflicts of interest in clinical practice guidelines: A systematic review

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Background: Despite the importance of conflicts of interest (COI) for clinical practice guidelines (CPG) development, there is high variability in the process of disclosure and management of COI across different organisations, which may result in documents with variable quality.
Objectives: To review definitions and classifications of COI from different organisations and to summarise their COI management process in CPG development.
Methods: MEDLINE, LILACS and DARE databases were searched up to July 21, 2016. Additional search was performed on reference lists and websites of organisations involved in CPG development. Studies evaluating COI in the context of CPG published in English, Portuguese or Spanish were included. Two independent reviewers extracted data related to COI definition, disclosure and management. Variables were synthesized narratively and summarisized using descriptive statistics.
Results: A total of 1802 articles were identified. Of these, 30 articles addressing COI definition, classification or management in CPG were selected. Only 12 articles clearly classified COI as financial or non-financial. COI disclosure forms were provided in 10 articles. Suggestions for COI management were reported in 27 articles: 57% said that a chair should not have any COI; 43% stated that a COI declaration should be publicly available; 26% suggested that members with COI should represent < 50% of the panel members; and 14% considered important

to have a representative composition in a CPG panel. Conclusion: There is heterogeneity in COI definitions and management processes across different organisations. Although most of them provide suggestions related to COI management, few organisations specify the approach that should be employed. In order to select an adequate approach, guideline developers must be aware of the existing methods and their differences.

2131

Using AGREE II to assess the methodological quality of clinical practice guidelines for Chagas disease

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Background: Chagas disease is caused by the protozoan parasite Trypanossoma cruzi and is classified by World Health Organization (WHO) as a neglected tropical disease. This disease is endemic in more than 20 countries in Latin America, especially in rural areas. In addition, nowadays it has been spread to other continents, mainly due to migration, and it is estimated that more than 8 million people are infected worldwide. Despite its importance, it is unclear the existence of trustworthy guidelines for this condition.
Objectives: To identify and assess the quality of clinical practice guidelines (CPGs) for Chagas disease.
Methods: We performed a systematic search in MEDLINE and National Guidelines Clearinghouse for CPGs for Chagas disease published up to July 2016. We contacted experts in order to identify additional documents. No date or language restriction was applied. A reviewer assessed the quality of CPGs using the Appraisal of Guidelines for Research & Evaluation (AGREE II) instrument. Results are presented as median and range.
Results: We identified 10 CPGs from eight countries (six CPGs from Latin America, two from Spain, one from the USA and one from WHO). The most recent document was published in 2012. All CPGs provided recommendations for diagnosis and treatment. Overall, the methodological rigour was poor: only one CPG used a systematic method for evidence search, four CPGs evaluated costs and four CPGs described conflicts of interest. Median scores were 78% (range: 44-100) for scope and purpose, 44% (0-67) for stakeholder involvement, 17% (12-60) for rigor of development, 78% (56-94) for clarity of presentation, 27% (8-63) for applicability and 8% (0-67) for editorial independence.
Conclusions: There is no high-quality evidence-based CPGs for Chagas disease. Overall, the available CPGs have low methodological quality and there are important concerns related to editorial independence and applicability. Therefore, considering the high prevalence of Chagas disease in different countries, trustworthy CPGs are required for worldwide use.

2132

Methods development for a new initiative - aerospace medicine systematic review group

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Background: Aerospace medicine focuses on the health of pilots, aircrews, astronauts and passengers. There are a few systematic reviews conducted in aviation medicine but none in space medicine. Therefore, we started to conduct two systematic reviews in space medicine: a) rehabilitation of astronauts after space travel; and, b) the impact of partial gravity on physiological outcomes. In conducting clinical trials on astronauts, terrestrial simulation studies are used to inform decision making.
Objectives: This abstract outlines the work on a methodological tool to evaluate simulation studies in these types of reviews.
Methods: The most valid simulation of human space studies are bed-rest studies. However, these studies can be

designed with potentially variable elements which may affect their quality as a simulation. We decided to develop a tool to judge the indirectness of bed-rest studies – compare the Bed-rest studies to an 'ideal design' study simulating the space environment. We tested the tool in the two mentioned systematic reviews. We identified the key features of an ideal 'bed-rest' study based on a review of the literature, consultation with experts and the aspects of European Space Agency (ESA) bed-rest protocols provided by the German Aerospace Centre.
Results: The tool also includes 8 items including head tilt, control on diet and daily routine, standardisation of phases, uninterrupted bed-rest, sunlight exposure, time of data collection and, finally, duration of bed rest. None of the studies in these reviews met all the criteria. Most studies do not manage sunlight exposure although it's a major issue for astronauts. The tool also records the duration of bed-rest, as simulation studies can only relate to spaceflight of similar duration and shorter bed-rest studies are unlikely to model longer-term space missions.
Conclusions: The tool is very useful to deal with systematic reviews in space medicine and is a fundamental tool for future systematic reviews in aerospace medicine. The first review is used as ESA topic team report to inform operational guidance.

2133
Standard search strategies should be conducted for clinical pathways in PubMed

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Background: Clinical pathways can effectively improve organisation efficiency and maximise patient outcome through organising and standardising care processes. Their retrieval from databases remains problematic and this presents a barrier to their uptake in medical practice.
Objectives: In order to provide guidance for making standard retrieval strategies of clinical pathways by analysing the differences in existing search methods in systematic reviews.
Methods:A medical subject headings (MeSH) terms search was performed in PubMed with critical pathways and systematical review. The articles included systematic review of clinical pathways. Selection of the studies and data extract was performed in EndNote and Microsoft Excel 2007 respectively. We extracted study characteristics (e.g. author, year of publication), search methods (e.g. search method, search words, search strategy).
Results: Twenty-three articles met the inclusion criteria, including a total of 24 clinical pathway search terms (show in Table 1). Search methods of 10 (43%) of the included studies were medical subject headings (MeSH) and a non-MeSH search (free text terms or key words); 3 (13%) only the medical subject headings (MeSH); 2 (9%) only non-MeSH search; 8 (35%) no-information search method.
Conclusions: Our findings shows there is a great difference in the retrieval strategies of the existing clinical pathways. In order to conduct systematics reviews conveniently and efficiently for researchers, policy makers and stakeholders in the database system, it is necessary to develop optimal retrieval strategies for retrieving clinical pathways.

Attachments: table 1.pdf

2134
Developing optimal search strategies of clinical pathways in PubMed

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Background: Clinical pathway is a tool to achieve case management in the management of the healthcare system, which can improve the quality of medical services and reduce the cost of medical care. Accessing research on clinical pathways quickly and efficiently is a critically important for health practitioners, clinical pathway experts and other related interests.
Objectives: Aim to develop a optimal search strategy for clinical pathways in PubMed.
Methods: An analytic survey was conducted. We determined the sample of journals that published the quantity of top 10 literature of clinical pathway in PubMed database; manual retrieved sample journals published in 2014-2016 as the gold standard; verified the clinical pathways of each retrieval, did statistical analysis and calculation of the sensitivity and specificity of the final selection.
Results: Only 76 (0.4%) of the 14 257 articles were clinical pathways. Different retrieval strategies are retrieved in PubMed database, the sensitivity and specificity was showed in Table 1.The most sensitive strategy included 7-term and had a sensitivity of 76.3% and a specificity of 11.65%. The best measure of specificity (42.86%) was found in a 3-term strategy, but with a considerable fall in sensitivity to 11.84%.
Conclusions: Clinical pathways can be retrieved from PubMed with close to suitable sensitivity or specificity by using empirical search strategies.

Attachments: Table1.pdf

2135
Is the dissemination bias still a problem?

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Background: A randomised-controlled trial (RCT) should only be considered completed once it is published.
Objectives: To establish the publication rate of RCTs and to analyse their determinants. We also estimate the location and time-lag bias and describe the bibliometric characteristics of the publications.
Methods: This retrospective cohort observational study detected any protocol and publication resulting from RCTs involving cancer-related drug products authorised by the Spanish Agency of Medicines and Medical Devices, between 1999 and 2003. Searches were conducted on MEDLINE, EMBASE, CENTRAL, and Google Scholar until 2015. We also consulted conference proceedings and clinical trials registries platforms. Whenever the database searches were unsuccessful we contacted the national coordinator in Spain, the study sponsor and the research ethics committee of the coordinating institution.
Results: We identified 168 publications of 303 RCTs. The publication rate was 55.4% after a mean follow-up period of 12 years. After including other forms of publication it increasing to 57.1%. The only factor associated to the likelihood of non-publication was the study setting favouring only-national RCTs (OR 2.7; 95% CI 1.5−4.8). We were able to determine the cause of nonpublication in 57 (42.2%), 38 (66.6%) of them having been closed prematurely for different reasons. The overall mean length of time since the authorisation to the publication in the journal was 6.5 years (ranging from 2 to 14 years). The time to publication was shorter for studies sponsored by the pharmaceutical industry, those with favourable results, and those involving less than 1000 patients. No differences were seen according to the study setting. All index publications were disseminated in international journals, 78.6% of them in specialised oncology journals. The mean impact factor of the index publications was 13.3 (ranging from 1.3 to 53.4).
Conclusions: About half of the RCTs on cancer during the target period have not been published. The national setting is a factor associated to non-publication whereas the direction of results determines its dissemination (impact factor and timely publication).

2136

The evaluation for quality of evidence of cost or economic outcomes through GRADE: A survey of Cochrane reviews

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Background: Evidence of cost or resource use is significant for formulating the recommendation under the GRADE approach when developing guideline. The Cochrane review routinely evaluates the quality of evidence through GRADE.
Objectives: Aim to investigate the evaluation of quality of evidence on cost or economic outcomes in Cochrane reviews.
Methods: We searched Cochrane Database of Systematic Review using the terms 'economic', 'economics', 'socioeconomic', 'insurance', 'cost', without limitation of the date which was from the inception to 5 January 2016. Two reviewers independently identified the reviews rating quality of evidence of cost outcome by GRADE and extracted the data.
Results: A total of 1215 records were retrieved from Cochrane Database, of these 14 were included published from 2012 to 2015. The number of outcomes focused on was ranged from three to seven; however, each review only reported one cost or economic outcome supported by one to six primary studies respectively such as 'Cost of service utilisation', 'Medicine costs', 'Cost-effectiveness', 'Health economic', 'Health costs', 'Economic outcomes', 'Cost', 'Economic data' and 'Cost of care'. The quality of evidence included one moderate, eight low and five very low.
Conclusions: The cost or economic outcomes were rarely reported and rated by GRADE in Cochrane reviews. Most outcomes were considered with low or very low quality of evidence.

2137
The methods of statistical analysis used in meta-epidemiological studies

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Background: In 2002, researchers chose two methods of statistical analysis for meta-epidemiological study, namely, fixed-effect of logistic regression and meta-analytic approach. To date, several additional statistical analysis methods are used in the meta-epidemiological studies.
Objectives: We aim to investigate the methods of statistical analysis used in the meta-epidemiological studies.
Methods: A literature search was performed in PubMed, EMBASE, Web of Science and Cochrane Library. The studies that had terminologies related to meta-epidemiology reported in the title or where the methods of statistical analysis were those of meta-epidemiology were eligible for inclusion. Two independent reviewers identified the eligible studies and extracted the data by using standardised forms. Disagreements were resolved by discussion or consulting the third reviewer.
Results: 3528 records were obtained from the search and 75 articles were included. 73 (97.3%) synthesised the data. Of which, 45 (60.0%) reported the methods of data synthesis. There were a total of nine methods of

statistical analysis including meta-regression (22/50.0%), logistic regression (14/31.8%), meta-meta-analysis (3/6.8%), meta-epidemiologic regression (1/2.3%), Egger's linear regression method (1/2.3%), Multivariate regression analysis (1/2.3%), the formula: Exp{ln(OR[FDA])—ln(OR[Pub])} in Microsoft Excel (1/2.3%), weighted linear regression (1/2.3%).
Conclusions: Only about half of the meta-epidemiological studies reported the statistical analysis methods of data synthesis, but almost all the methods are related to regression and meta-meta-analysis.

2138
The present situation of systematic review training courses in China

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Background: With the wide spread of evidence-based medicine, the need for a systematic review (SR) training courses is urgent. Several organisations are providing it for those who need relevant knowledge. Therefore, we conducted a study on the present situation of od SR training courses in China.
Objectives: To explore the present situation of SR training courses in China.
Methods: We reviewed the official sites of evidence-based medicine centres and databases like CNKI and Wanfang data to extract information about SR training courses in China, and we used Google to retrieve more information. We chose the courses held in 2016 as our sample. Finally we pooled the extracted data and analysed them, and compared that with results of our former project with same topic in 2015.
Results: There were 19 courses held in 2016, mostly on June and August, and held in 7 cities, especially in Beijing (the Capital of China). The course duration ranged from 1 day to 4 days and training fees range was 0 to 3500 CNY (520 USD). Organisations which held the courses were mostly academic institutions and biomedical companies, 7 were purely held by academic institutions, 9 were held by biomedical companies, and 2 courses were held by institutions and companies jointly. The contents of the courses covered basic knowledge, conception and development of SR, etc. Six courses included GRADE training. What's more, compared with our former project, the courses held only by academic institutions dropped from 42% in 2015 to 36% in 2016.
Conclusions: In addition to the SR training courses in China, there are still many aspects to explore, such as the effect of the training course and the factors related to it. Conflict of interest in training course is a good aspect to consider.

2139
Reporting of randomisation in randomised-controlled trials on traditional Chinese medicine: A comparison of three Chinese medicine journals

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Background: By March 2017, the Cochrane CENTRAL has incorporated 19 918 citations and abstracts of randomised trials (RCTs) on traditional Chinese medicine (TCM) identified and translated from Chinese journals. However, many empirical studies have presented methodological problems in the published RCTs on TCM, among them, the reporting of randomisation is essential.
Objectives: To explore the trend of randomisation reporting in RCTs on TCM and its association with the inclusion status of the journal in the Core Journals Guide of China (which is similar to the Science Citation Index of China) amongst other factors.
Methods: Journal of Beijing University of Traditional Chinese Medicine (core journal), Journal of Guangzhou University of Traditional Chinese Medicine (core journal after 2005), Journal of Fujian University of Traditional

Chinese Medicine (non-core journal) in the year 2005, 2008, 2011, and 2014 were chosen to identify RCTs on TCM. The inclusion statuses of the journals in the Guide and other factors associated with the reporting quality were analysed by logistic regression.
Results: 313 randomised trials were identified, of which 151 (48.24%) reported the sequence generation methods, improved over the 4 years of observation (31.51%, 44.59%, 49.28% and 62.89%); 10 (3.19%) reported details on allocation concealment (table 1). Year of publication (before or after 2010) (OR 2.08, 95% CI 1.32-3.30) and the inclusion in the Guide (OR 1.60, 95% CI 1.01-2.53) were independently associated with the reporting of sequence generation. Funding levels (funding of national level reported or not), number of authors and intervention types had no statistically significant association with the reporting of randomisation.
Conclusions: The reporting of sequence generation shows improvement but the reporting on allocation concealment is alarmingly low, indicating the comprehensive methodological training is still warranted. Meanwhile, RCTs from the journals listed in the Core Journal Guide have a slightly higher reporting quality, indicating the possibility that the overall reporting quality can be improved by utilising a more rigorous vetting system.

Attachments: Table 1 Included RCTs and reporting of randomization.jpg

2140
Course of serological outcomes in treated subjects with chronic Trypanosoma cruzi infection: A meta-analysis of individual participant data conducted in Argentina

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Background: Chagas disease is caused by the parasite Trypanosoma cruzi. (T. cruzi) and is endemic to Latin America. In the chronic phase of the disease, treatment success is determined by seronegativisation, i.e. disappearance of anti-T. cruzi antibodies.
Objectives: To describe the evolution of conventional serological tests after treatment with nifurtimox or benznidazole in chronically infected subjects.
Methods: The systematic review and meta-analysis protocol was registered in PROSPERO (CRD42012002162). Electronic searches were updated in July 2015. Primary outcomes were dichotomised as negative or positive: enzyme-linked immunosorbent assay (ELISA), indirect immunofluorescence (IIF), and indirect hemagglutination assay (IHA). The Risk of Bias (RoB) was assessed by using Cochrane tools. It was judged as low, moderate, or serious. Discrepancies and queries were resolved through discussion and by contacting the primary authors. The survival and hazard functions were estimated. The Kaplan-Meier method, Log-rank test, and Cox proportional hazards regression model were applied. A random-effect model was included. Hazard Ratios with 95% of confidence interval were calculated. Subgroup analyses were based on the age at treatment (1-19 years vs >19 years) and the country/region where the infection was acquired (Argentina, Bolivia, Chile, Paraguay-TcV genotype predominant vs Brazil -TcII predominant). SAS software was used. PRISMA-IPD statement was followed.
Results: Individual-level data from 27 out of 48 studies were obtained (1.311 subjects) (Figure 1). RoB was low in 17 studies (63%). Survival plots showed differences between children/adolescents (1-19 years) and adults (Long-rank test <0.001 for ELISA, IIF and IHA test) (Figure 2). Adjusted Cox model showed interaction between region and age at treatment. There was a higher chance of seronegativisation for subjects treated at 1-19 years compared to adults, especially in the region of Brazil (Table 1).
Conclusions: soccurs earlier in children/adolescents compared to adults. Interaction between age at treatment and region was observed for all outcomes, being stronger for IIF test.

Attachments: Figure 1.pdf, Figure 2.pdf, Table 1.pdf

2141

Challenges for evidence-based decision making in Korea

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Background: The Health Insurance Review and Assessment Service (HIRA) is responsible for the review, quality assessment, and the setting and management of benefit standards of the National Health Insurance in South Korea. HIRA operates a variety of separate committees, including the Healthcare Review and Assessment Committee. Each committee reviews and evaluates matters regarding the decision making for NHI coverage.
Objectives: Each committee requires contextualisation for decision making for NHI coverage. The review results should be evidence based, reflecting the importance of a fair, specialised, objective approach. In order to achieve such objectivity, we introduce and suggest future directions for the evidence-based decision supporting system in HIRA.
Methods: The Evidence-Based Review Manual (EBRM) unique to HIRA was developed to standardise the rapid-review format for meeting materials based on a manual. The EBRM Master Program was also set up to encourage continuous training in HIRA.
Results: According to the EBRM guideline, the standard format documents are produced for an efficient decision-making process. The EBRM are composed 4 step: 1) Item→ 2) Regulation & Institute opinion→ 3) Rapid-evidence review method→ 4) item discussion. Rapid-evidence reviews in EBRM (3rd step) are composed: text book, Clinical guidelines in medical standard, rapid review in scientific evidence, supplement. The current guideline has formed the basis for the preparation of conference materials, ensuring that Committee meetings. EBRM Masters obtain on internal qualification of HIRA, and serve to improve utilisation of evidence and co-operation between staff (114 persons of the EBRM certification in 2007~2016). The qualification programme included the fields of the statistics, epidemiology, theory and practice education of EBRM rapid-review method.
Conclusions: For the future, HIRA has tried to develop the efficient rapid-review method (EBRM) and to enhance the accessibility for systemised programmes (web-based education system). HIRA continues to make efforts for the advancement of an evidence-based decision-making system.

2142

Acne treatment guidelines: Are they a CUT (Clear Unbiased Trustworthy) above the rest?

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Background: Acne, a chronic inflammatory skin condition, is the eighth most prevalent disease globally. Acne is treated by a wide range of care deliverers in a variety of settings. Given the large number of treatments available, there is a need for clear, unbiased, trustworthy (CUT) guidelines.
Objectives: To assess how many recently published acne treatment guidelines were developed using the AGREE II Instrument and to evaluate the effect on reporting quality using the AGREE Checklist.
Methods: Searches included Medline and Embase (01/2013 - 12/2016) and web-based guideline depositories. Six assessors, including 1 patient, with expertise in dermatology and/or critical appraisal scored the guidelines independently using the AGREE Reporting Checklist 2016. Discrepancies between scores of ≥3 were resolved through discussion or, where necessary, re-evaluation.

Results: Searches retrieved 274 articles identifying 8 treatment guidelines including 1 in Chinese translated prior to assessment. Only 2/8 used AGREE II in the development process; 1/8 rated the quality of evidence using validated methods; 5/8 took harms into consideration when formulating recommendations; 1/8 included a patient representative; 2/8 had external peer-review; 4/8 provided incomplete plans for updating; and, 6/8 provided disclosures (sometimes ambiguous) of competing interests. Five stated they were evidence-based. Four conducted a systematic literature review. Stakeholder representation on the development group was poor in 7/8 (1 not disclosed) with a preponderance of dermatologists. Five were funded by the pharmaceutical industry. Use of AGREE II during guideline development did not have the expected level of impact on quality ratings.
Conclusions: Acne treatment guidelines demonstrated variable reporting quality. Only 4/8 fulfilled the US Institute of Medicine definition of a clinical-practice guideline. Lack of methodological transparency, ambiguity, and freedom from potential bias challenge their trustworthiness highlighting the need for improvement. Resulting inconsistencies in recommendations may unintentionally divert the provision of optimal health outcomes.

2143

Combining agribusiness training and skillful parenting to reduce violence against children in impoverished communities in rural Tanzania: A pragmatic cluster randomised-controlled trial

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Background: There is emerging evidence regarding the effectiveness of parenting programmes to reduce the risk of violence against children in low- and middle-income countries. However, in highly-deprived communities, parenting programmes may require additional economic support to address the negative impact of poverty on parenting and risk of abuse.
Objectives: This study is the first to use a cluster randomised-controlled trial to examine the effects of parenting and economic strengthening on reducing the risk of violence against children in impoverished farming communities in rural Tanzania.
Methods: Participating villages were randomly assigned to 1 of 4 conditions: a) 12-session group-based parenting programme; b) agribusiness training; c) combination of parenting and agribusiness programmes; and, d) or 1-year wait-list control (N = 8 villages, 247 families, 2:2:2:2 arm ratios). Primary outcomes assessed at baseline, mid-treatment, and 1-year post-baseline included harsh and positive parenting as well as attitudes towards corporal punishment. Secondary outcomes included household poverty, parenting stress, caregiver/child depression, child behaviour, nutrition, development and labor.
Results: Analyses found significant effects in reducing child maltreatment for villages receiving the parenting component in comparison to controls. Significant decreases in parents' acceptability of corporal punishment and children's report of harsh discipline were detected in the combine intervention group. Reductions in household poverty were found in the combined intervention and agribusiness training-only groups. There were no significant intervention effects for any other outcomes.
Conclusions: Results suggest that while agribusiness training may reduce household poverty, parenting training may be essential to reduce child maltreatment in rural Tanzania. However, further intervention refinement may be necessary due to no improvements in other outcomes. It is also recommended that future research incorporates a factorial experimental design with a larger sample size with and longer-term follow-up assessments to determine the distinct effect of intervention components.

2144

Television White Space (TVWS) telemedicine implementation in Botswana: Challenges and opportunities

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Background: Television white space (TVWS) refers to previously unused TV radio-frequency channels that can be leveraged to obtain broadband internet access. When set up and maintained properly, TVWS technology has the potential to provide high-speed connectivity to remote areas. TVWS has been piloted globally within the education, agriculture and commerce domains. We describe the first effort to utilise TVWS for improving healthcare access within poorly connected regions of Botswana. Because this technology is so new, implementation faces many challenges. We seek to share our experiences to increase awareness of TVWS and help organisations understand the challenges and opportunities that come with this technology. Objective:To evaluate the challenges and opportunities of implementing TVWS technology in Botswana to improve access to point-of-care medical information and care in clinics with limited access to healthcare.
Methods: Prior to implementation of TVWS technology in several remote clinics in Botswana, TVWS access was installed and clinicians were trained to use the electronic medical record (EMR) system for patients' data capture and transfer. TVWS connectivity was evaluated by collecting data on network outages, internet speed tests, and overall network utilisation across various sites.
Results: Internet speed tests and network outages indicate that TVWS connectivity bandwidth varies significantly across sites, often outperforming existing government internet. However, TVWS connectivity was slower than the recommended 10Mbps for supporting high-quality, live telemedicine consults. Despite the bandwidth challenges, a total of 161 cases were registered on the EMR platform and shared with specialists for review using TVWS.
Conclusions:TVWS technology has the potential to strengthen healthcare delivery and telemedicine practices in resource-poor settings; however, this opportunity cannot be fully realised without proper systems in place. Initial implementation of TVWS in Botswana demonstrates that without reliable maintenance of rapid upload/download speeds, user confidence may be compromised, thus making the utility of TVWS questionable.

2145

Facility-imposed barriers to early utilisation of focused antenatal care services in Mangochi District, Malawi – A mixed-methods assessment

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Background: Focused Antenatal Care (FANC) has been advocated by the World Health Organization as a key service approach to improving health of pregnant women and their babies. Four targeted visits to antenatal clinics were recommended; with the first visit done in the first trimester. Malawi national uptake of FANC in first trimester is 12%, while it is even lower in Mangochi district at 8%.
Objectives: To identify facility-imposed barriers to early utilisation of FANC services.
Methods: This was a repeated cross-sectional assessment that was conducted during implementing CDTFA meetings in communities. The study participants were of reproductive age group in the villages who attended FANC promotion meetings. Both the study and assessment were done from January to August, 2016. Data were collected through flexible interactive processes from participants who attended village level meetings
Results: Meetings were held in each of 403 villages of Mangochi district. During these interactions with community members we noted that promotion of male partner involvement was resulting in some women not accessing FANC services as those who did not bring their partner were not accepted at the clinics. Pregnant women are required to bring a cloth wrapper for the newborn in advance when they come for deliveries. This requirement prevents those women who cannot afford cloth wrappers from accessing FANC services. Other costs such as payment for authorisation letters from Village Heads for women who have no partner at the time of initiating FANC clinic and user fees in faith-based health facilities are also barriers in as far as early utilisation of FANC services is concerned.

Conclusions: Despite the benefits of integrating health services through the FANC service model, there is need to ensure that the approach to its promotion does not bar pregnant women from accessing services. Exploration of these barriers is necessary to enable health authorities to redesign FANC health promotion strategies that will promote uptake of integrated services in FANC clinics without infringing on the rights of the very same pregnant women to access healthcare.

Poster session 3 Friday: Evidence Tools / Evidence synthesis - creation, publication and updating in the digital age

3001

Designing patient versions of SIGN guidelines with service users

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Background: The Scottish Intercollegiate Guidelines Network (SIGN) led work package three of the European collaborative project DECIDE which focused on improving the design of patient versions of clinical guidelines. Improving the way this information is presented helps to empower people to take an active role in shared decision making.
Objectives: The aim of the present study was to engage with parents and carers of children and young people with autism spectrum disorder (ASD) to test an improved patient version of the guideline.
Methods: Parents and carers were recruited from across Scotland. User testing involved a formal 'think aloud' process and semi-structured interview to guide users through the booklet. Sessions took place individually and were recorded and transcribed. Key findings were analysed and themed using the honeycomb user experience model.
Results: Fourteen user testing sessions were conducted. Key facilitators for usability and desirability of the guideline included chunking of text, consistent use of colour coding and boxes to highlight important information. Language that is easy to read, and written to promote partnership between healthcare professionals and service users was seen positively. The booklet was valued by users, who expressed a desire to have it. Clearly outlining key stages in the patient journey was useful, and made parents feel empowered. There was not a clear consensus on the usefulness of rating the strength of evidence underlying recommendations. There was a lack of awareness of this booklet, which is a major barrier to the public finding and accessing patient versions of guidelines.
Conclusions: This user testing enabled us to develop a tailored and practical booklet for the target group. There is a fine balance between providing sufficient information and information overload. Patient versions of guidelines need to clearly state their intended purpose, and how a user can make use of them. The findings have implications for presenting evidence-based information. It appears that evidence grading should be included in patient versions but kept as simple as possible.

3002

Conflict of interest disclosure and management in Japanese clinical practice guidelines

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Background: Conflict of interest (COI) disclosure and management are essential factors for transparency in development process of clinical practice guidelines (CPGs). In 2011, Institute of Medicine (IOM) published

'Standards for Developing Trustworthy Clinical Practice Guidelines”'in Clinical Practice Guidelines We Can Trust which offered the management perspective of COI. In 2015, Guidelines International Network proposed 'Principles for Disclosure of Interests and Management of Conflicts in Guidelines'.
Objectives: To clarify COI disclosure and management situation in Japanese CPGs
Methods: CPGs published between 2011 and 2016 were evaluated by the CPG evaluation group using the Appraisal of Guidelines for Research & Evaluation II Instrument (AGREE II). AGREE II is composed of six domains consisting 23 items and overall assessment. In this study, we focused on the sixth domain, Editorial Independence based on the item 22 (funding body) and the item 23 (competing interest). In addition, we analysed how COI disclosure and management were described.
Results: The mean scores (0-100%) of Editorial Independence domain by publication date were as follows: CPGs published in 2011, 29% (n=78); CPGs published in 2012, 27% (n=76); CPGs published in 2013, 34% (n=80); CPGs published in 2014, 39% (n=92); CPGs published in 2015, 44% (n=78); and CPGs published in 2016, 59% (n=37). In all evaluated CPGs, the mean scores (range 1-7) of the item 22 and the item 23 was 3.3 and 2.8, respectively. In the way of COI disclosure, there was a tendency to describe the related company names unlinked with names of guideline development group member. Almost all CPGs did not describe the management of COI in the development process.
Conclusions: This study revealed that description regarding COI disclosure in Japanese CPGs has been improved during the past five years. However, the management of COI in CPGs development process still remains a big issue. Further studies on CPGs development process are necessary for guideline development groups to manage COI better.

3003
Involving patients in the development of clinical practice guidelines in Kazakhstan

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Background: The increasing quantity of initiatives involve patients in the development of clinical practice guidelines (CPGs). However, the way applied patient involvement is important to achieving a quality patient-oriented CPGs. Patient preference is defined as the appraisal of an individual who is informed and knowledgeable about the probabilities and severity of the effects and risks of interventions, and about process and outcome aspects of healthcare.
Objectives: The purpose is to present a approach for patient involvement that includes both robust patient consultation and participation. This approach is based on the Kazakhstan's experience in the development of three CPGs contained in the Kazakhstan CPGs Development Program, which deemed it a beneficial nation-wide patient involvement initiative.
Methods: Patient consultation in the first CPG development phase mixes quantitative and qualitative primary analysis techniques as well as a systematic review of patient-perspective studies. Participation depends on patients and patient representatives as members of the guideline development groups in all development phases at the same level as professionals.
Results: Patients and patient representatives provided relevant information on their perspectives, experiences with the illness, social conditions, patterns, values and preferences. They collaborated in different CPG development phases, including setting the scope and objectives, defining key research questions, writing and reviewing recommendations, developing patients' versions and the dissemination of CPGs.
Conclusions: The used approach allows for patient-oriented CPG development, but requires relevant knowledge of qualitative research tools (primary research and systematic review of qualitative evidence) for developers. It is also significant to have specific support for patients, previously selected with eligibility criteria, to facilitate an effective engagement, providing clear guidance on their tasks and ensuring opportunities to attend CPG training.

3004
Public and patient involvement in the HTA decision-making process in Kazakhstan

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Background: As health technology assessment (HTA) in Kazakhstan seek to involve the public and patients in their activities, frameworks to guide decisions about whom to involve, through which tools, and at what stages of the HTA process it is necessary. Public and patient involvement (PPI) in HTA process could make assessments more relevant and acceptable to them. Involving them in the development of the assessment plan is also crucial to optimise their influence and impact on HTA research.
Objectives: The aim of this study was to describe the development and outputs of a viable framework for PPI in a HTA process.The study objectives are assessment plan from the point of view of patients and other groups involved in HTA.
Methods: This study includes analysis of approaches to participation and research, as well as case studies. Also, the study include a synthesis of international practice and published literature, a dialogue with local, national and international stakeholders, and the deliberations of a Joint Committee for Quality Healthcare Services MoH.
Results: Patient Involvement in HTA enables experts in the HTA community to study these complementary ways of taking account of patients' knowledge, experiences, needs and preferences. Choice of tools should be considered in the context of each HTA stage, goals for incorporating societal and patient perspectives into the HTA process, and relevant societal and/or patient values at stake. Our results is structured around main actionable tools: guiding principles and goals for PPI in HTA process, a flexible array of PPI strategies, and on-going evaluation of PPI to make adjustment.
Conclusions: The framework developed could be applied to design and implement strategies for PPI in HTA activities. Core elements of this framework may apply to all organisations responsible for HTA in Kazakhstan. Given the actual state of evidence, integrating patient perspective in HTA activities has the potential to improve the quality of healthcare services.

3005

Integrating guidelines and evaluations: The Swedish model for improving adherence to national guidelines on multiple sclerosis

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[1] The National Board of Health and Welfare, Sweden

Background: The Swedish National Board of Health and Welfare works with the aim to establish good and equal healthcare in Sweden. In a decentralised healthcare system national guidelines provide steering. Further information on improvement areas from a steering perspective can, however, be achieved by combining the guidelines with indicators for assessments, target-levels and an evaluation of current performance using national patient registries.
Objectives: The aim is to establish good and equal healthcare in Sweden by increased adherence to the guideline for multiple sclerosis.
Methods: A standardised, systematic and transparent processes to develop the guideline, which includes a body of scientific evidence with prioritised recommendations, indicators with target-levels and a National assessment and evaluation was used. These processes involve patients, professionals and decision-makers in the healthcare system. Evaluation was done based on different nationwide patient registries together with directed questionnaires.
Results: A guideline for multiple sclerosis with indicators for assessment, target-levels and a nation-wide evaluation were developed and published.
Conclusions: The integrated work provides best-available knowledge on methods to use but also on current performance in a healthcare area. As such it is a very valuable tool for healthcare providers working with development and improvement of healthcare.

3006

Integrating guidelines and evaluations: The Swedish model for improving adherence to national guidelines in Parkinson's Disease

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Background: The Swedish National Board of Health and Welfare works with the aim to establish good and equal healthcare in Sweden. In a decentralised healthcare system national guidelines provide steering. Further information on improvement areas from a steering perspective can, however, be achieved by combining the guidelines with indicators for assessments, target-levels and an evaluation of current performance using national patient registries.
Objectives: The aim is to establish good and equal healthcare in Sweden by increased adherence to the guideline for Parkinson's Disease.
Methods: A standardised, systematic and transparent process to develop the guideline, which includes a body of scientific evidence with prioritised recommendations, indicators with target-levels and a national assessment and evaluation was used. These processes involve patients, professionals and decision-makers in the health care system. Evaluation was done based on different nationwide patient registries together with directed questionnaires.
Results: A guideline for Parkinson's Disease with indicators for assessment, target-levels and a nation-wide evaluation was developed and published.
Conclusions: The integrated work provides best-available knowledge on methods to use but also on current performance in a healthcare area. As such it is a very valuable tool for health care providers working with development and improvement of healthcare.

3007

Priority setting in the Swedish stroke guidelines

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Background: The Swedish Stroke Guidelines issued by the National Board of Health and Welfare are a support for decision makers to allocate resources efficiently within the healthcare system. The guideline process contains four main steps; 1) identification of key clinical PICOs (Patient Intervention Control Outcome); 2) review of the scientific evidence and, in case of insufficient evidence, compilation of best practice/consensus; 3) priority-setting; and, 4) key recommendations. Priority-settings are made by a multi-professional group of clinical experts and patient representatives. They rank the intervention based on disease severity (patients' needs), effect of intervention, evidence, and cost-effectiveness. Highly ranked interventions should receive more resources than those with lower rank.
Objectives: The main goal was to further refine the priority-setting procedure in the Stroke Guidelines, by using a modified Delphi method in the current guideline revision round.
Methods: The 25 members of the priority-setting group reviewed background information and evidence summaries and gave their preliminary priority votes through a web questionnaire. Ratings and comments were aggregated and anonymised, and present to the group for a second Delphi round. Priority ratings were finalised at four face-to-face meetings.

Results: About 110 PICO-questions were assessed, divided in four batches. For the vast majority of items, the priority score did not change more than marginally from the second Delphi round to the final decision. However, for 17 items, the face-to-face meeting led to a substantially different priority setting, a decision to await further upcoming scientific evidence, or a decision to discard the PICO-item from the guidelines. Experiences from the priority-setting group members will be systematically evaluated and presented.
Conclusions: The method of a modified Delphi process, with feedback from two anonymous survey rounds combined with face-to-face meetings, appeared well feasible and effective for priority setting in the Swedish Stroke Guidelines.

3008
Adapting national to international guidelines and back – an example on groin hernia guidelines

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Background: In 2002, the Dutch Society of Surgery took initiative to develop Dutch guidelines on inguinal hernia. Carrying on the success of these guidelines, the European Hernia Society invited the Dutch chair to develop guidelines in European context. A working group representing 14 countries published European Hernia Society guidelines of inguinal hernia in adult patients in 2009. Last year, the guidelines were updated and adapted to a global perspective, resulting in the publication of World Guidelines for Groin Hernia Management (WHO, 2016). This year we will adapt the world guidelines for Dutch use. A joined effort will be made by the Dutch Society of Surgery, Cochrane Netherlands, and the Knowledge Centre of Medical Specialists.
Objectives: To identify barriers and facilitators for updating and adapting guidelines in several perspectives.
Methods: Guidelines on inguinal hernia have been updated and adapted to different perspectives (Dutch, European and global). The latest adaptation has started this year. Experiences from the chairs, working group members and methodologists are collected in a quantitative manner.
Results: Adapting guidelines on inguinal hernia from a national to an international perspective and back seems to be efficient. Clear and full reporting of methods and results is essential in this process to produce good-quality guidelines. For example, having access to declarations on conflicts of interest of the working group, search strategies, GRADE profiles and evidence to decision frameworks is needed to adapt and update a guideline. Clinicians and methodologists participating in both international and national working groups facilitates the adaptation process even further. One should avoid leaving publication rights to a commercial organisation, as it may obstruct re-use of evidence syntheses.
Conclusions: Developing guidelines that are suitable for adaptation should be aimed with more guidelines. This can lower costs spend on guidelines development, leaving room to address more topics and/ or update guidelines more frequently. The European Hernia Society and the Dutch Society of Surgery have set a good example.

3010
Using reference manager (Mendeley) in systematic reviews

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Background: Reference Managers are software specialised in organising and sort references by some criteria. Mendeley is a free software which could help in organising research as a reference manager and also collaborate with other researchers online with the latest research. There is a possibility to import papers and read from anywhere online.

Objectives: Help researchers to select articles utilising Mendeley. Assessment of data from researchers around the world to find trials. Search methods: After defining PICO and search strategy researchers could import references from many databases as PUBMED, EBSCO and Science Direct and others. Researchers can create a folder for a systematic review and create subfolders to insert the results found from any databases. The folders can be shared with other researchers online to decide which paper will continue in the SR. Mendeley web share references from researchers around the world based on researchers uploads articles on the desktop or the web. The Mendeley group databases have over 30 millions of papers. The utilisation of this resource could increase the possibility of finding more trials to include on the SR. The process to find papers in Mendeley is the same from the other. The Boolean operators AND, OR and AND NOT could be used. Mendeley group has continuously made improvements on the site and desktop based on researchers users. The use of SR is a promising future. The intention is an open web library. References: Lorenzetti DL, Ghali WA. Reference management software for systematic reviews and meta-analyses: an exploration of usage and usability. BMC Medical Research Methodology. 2013;13:141. doi:10.1186/1471-2288-13-141. Beranova, Eva et al. A systematic review of computer-based softwares for educating patients with coronary heart disease. Patient Education and Counseling , Volume 66 , Issue 1 , 21 – 28.

3011

PATH's 10-Part Advocacy Strategy Development: A tool for evidence building and use in engagement with policy makers in Uganda

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Background: Data works as intelligence for decision making and is used to create evidence for advocacy and demonstrates impacts an organisation delivers. Advocacy for Better Health uses PATH's 10 parts advocacy strategy development to ensure that evidence has a specific purpose to address the needs of citizens, stakeholders, decision makers and policy makers.
Objectives: The Goal of the advocacy Strategy is to guide effective advocacy for issues of citizen concerns for improved quality, accessibility, availability of health and social services.
Methods:PATH's 10 part advocacy strategy involves context and situation analysis of thematic areas in focus (nutrition, malaria, HIV, Maternal and Neo natal Child Health, Reproductive Health, and the plight of orphans and vulnerable children. Problem analysis and objectives analysis are conducted to facilitate goal setting and this evidence generated is used in identification of decision makers, decision-maker interests, packaging of messages with corresponding tactics and a clear plan of measuring success. Packaged in form of fact sheets, dossiers and presentations, the evidence is transmittable, easy to digest and shareable and has been found effective in compelling decision makers to take action on policy change.
Results: As a result districts have enacted and implemented Ordinances to reduce absenteeism and school dropout of children, Uganda is reviewing the Uganda Nutrition Action Plan (UNAP) 2011-2016 to ensure that districts include nutrition activities in District Development Plans and budgets. The Parliament of Uganda is to launch Parliament Tuberculosis caucus to raise profile of the issues and ensure increased domestic funding for TB activities in the country from current 4% funding to 25% to less donor dependency.
Conclusions: The approach has increased utilisation of evidence to inform advocacy to influence the formulation and implementation of policies, legislation and programmes and allocation of budgets to programs in health and social services at national and district levels References Advocacy for Better Health (2015). Advocacy Strategy 2015 – 2019, PATH, Kampala

Attachments: GESPATH's 10-Part Advocacy Strategy Development The Tool promotes evidence building and use in engagement with Policy make.pdf

3012

Stakeholder analysis for advancing health-technology assessment in India: A pilot

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Background: Health technology assessment (HTA) could potentially have an impact on the policy making in developing countries where a large population is affected by healthcare services and resources are limited to provide public healthcare services. India is characterised by low public-sector expenditure and high private out-of-pocket expenditure. There is an increasing emphasis on usage of evidence-based tools such as HTA for future investments and decision making for the Indian healthcare system. It is essential to understand the perspective of the various stakeholders especially decision makers how far as evidence building tools such as HTA are taken into account in decision making.
Objectives: This study aims to explore and understand the perspectives of several key stakeholders in the use of HTA for evidence-informed policy decision making in the context of the Indian health system
Methods: A stakeholder analysis was undertaken to understand the knowledge, position and interest in HTA of key stakeholders. Seven semi-structured interviews were conducted in April-June 2013 with policy makers, academicians, industry experts and community representatives from India. A semi-structured questionnaire was designed based on WHO framework for evidence informed health policy making.
Results: Though there is a good understanding of HTA among the national level policy makers, academicians, civil society representative and industry experts, there is lack of knowledge about the subject amongst policy makers at the lower level. There is a positive perception of on producing and using HTA for decision making among all interviewed stakeholders. Further at national level, institutions prefer to tread the use of HTA evidence with caution as there is very limited capacity in the health system to adopt evidence based tools.
Conclusions: This stakeholder analysis suggests a mixed response in implementing HTA in India. However, there are factors involved in implementing such tools, which can be dealt with using various approaches. Finally there is positive view at national level to push the HTA agenda forward for better health decision making.

3013

Effectiveness of Problem-Based-eLearning (e-PBL) for pre- and post-registration health professional education

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Background: Problem-Based Learning (PBL) has been used as an effective pedagogy approach in medical education for over 40 years. It is based on the assumptions that learning is a constructive, collaborative, contextual and self-directed process. As technology advances, the integration of eLearning technologies with effective pedagogical approaches has the potential to deliver the effective teaching strategy required to address the need of healthcare workforce demand in term of quality and quantity.
Objectives: The objective of this review was to evaluate the effectiveness of e-PBL interventions for delivering pre-registration and post-registration healthcare professional education. We primarily assessed the impact of these interventions on learners' knowledge, skills, attitudes and satisfaction. Additionally, we also aim to assess the economic impact (cost and cost effectiveness) and potential unintended or adverse effects of e-PBL based educational interventions.
Methods: MEDLINE (Ovid), EMBASE (Elsevier), the Cochrane Central (Wiley), PsychINFO (Ovid), ERIC (Ovid), CINAHL (Ebsco) and Web of Science Core Collection (Thomson Reuters) were searched for studies on eLearning from 1990 to August 2016.

Results: The search strategy yielded the total of 25 739 records and 15 RCTs were included. The majority of the included studies (86%) were focusing on pre-registration health professional education and most of the participants were medical students (84%). Online eLearning was the common mode of intervention to deliver learning content in combination with PBL approach.
Conclusions: Our preliminary results suggested that the use of e-PBL in medical education is promising, specifically for pre-registration medical education. However, the overall quality of evidence was low for the included studies due to unclear risk of bias, inconsistency and indirectness. More high-quality research is need in this area particularly on the effective of e-PBL in post-registration medical education.

3014
Virtual reality environments (VRE) for pre-and post- registration health professional education

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Background: Virtual Reality Environments (VRE) are simulated counterparts of a real world that can help users experience situations that would normally be difficult in the real world to gain practical knowledge and experience in a simulated environment.
Objectives: The objective of this Cochrane review is to assess the effectiveness of VRE-based eLearning for pre- and post-registration healthcare professionals (HCPs) in terms of their knowledge, skills, attitude gain and satisfaction.
Methods: Seven databases were searched for studies on eLearning from 1990 to August 2016.
Results: The search strategy yielded 25 739 records and 41 RCTs with 2700 participants were included. The interventions tested in studies consist of three dimensional (3D) VREs displayed on a computer screen, 3D digital anatomy models, virtual reality clinics, rooms and head-mounted virtual reality displays. The interventions that these were compared to (the control interventions) were traditional classroom/textbook learning, 2D images and 3D VREs. Our findings suggest that certain subgroups of VRE (Virtual clinics/patients and 3D models) probably improved knowledge gain post-intervention for pre-registration healthcare professionals compared to traditional learning (face-to-face lecture, textbooks, paper-based learning, printed models, simulated patients and manikins) or using 2D-images (computer- and textbook-based learning).
Conclusions: Based on our preliminary findings, the effectiveness of VRE-based eLearning interventions in medical education is promising. However, the overall quality of evidence was low due to unknown risk of bias and inconsistency.

3015
Harmonising clinical practice guidelines and shared decision making

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Background: Clinical practice guidelines (CPGs) often grade recommendations as Strong or Weak. Weak recommendations are used if there is uncertainty that benefits outweigh harms, due to uncertainty in evidence or uncertainty in the balance of benefits and harms across the range of patient preferences. Shared decision making (SDM) means patients should be informed of relevant evidence for inclusion in decision making for preference-sensitive decisions. Conflating certainty of evidence for net benefit and sensitivity to patient preferences does not preserve these distinctively important concepts.
Objectives: We developed a model to convey strength of recommendations for preference-sensitive decisions.
Methods: Healthcare Guidance for Patients Society (Healthcare GPS) includes experts in evidence-based medicine (EBM), CPGs and SDM. We considered the Grading of Recommendations Assessment, Development and Evaluation (GRADE) and International Patient Decision Aids Standards Collaboration (IPDAS) standards and developed (via a consensus-based approach) a model for recommendation phrasing.
Results: An EBM-SDM framework would use a strong recommendation to offer options with an SDM approach for preference-sensitive conditions with a high certainty of net benefit for some patients (and net harm for some patients with different preferences). This seems more appropriate for phrasing for recommendations such as therapies with well-established benefits and harms for patients with cancer. Strong recommendations to perform the action would be made for preference-insensitive conditions. Similar patterns occur for weak recommendations.
Conclusions: Many current clinical guidelines do not incorporate patient preferences or individual perspectives in the development or implementation of recommendations. SDM tools within guidelines (and explicit recognition of which recommendations are best implemented using an SDM approach) can encourage patient engagement and involvement. We offer a solution on how to incorporate SDM within guideline development. Such phrasing formats can be tested in CPGs to assess impact on clinician and patient understanding, patient engagement and SDM.

3016

Individual effects for well-informed shared decision making for atrial fibrillation thromboembolic prophylaxis: WISDM for A FIB

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Background: Options for embolic stroke prevention in atrial fibrillation include anticoagulants (apixaban, dabigatran, edoxaban, rivaroxaban, warfarin), antiplatelet agents (aspirin with or without clopidogrel), and left atrial appendage closure. Comparisons of options have limited accuracy for individual decisions due to selective use of evidence for relative-risk estimates, not applying relative-risk estimates to individual risk, or misalignment of outcomes used for relative risk and individual risk estimates. Accurate individualised estimates need to be communicated clearly for clinicians and patients to make informed decisions.
Objectives: We systematically determined the evidence needed for informed shared decision making and produced a tool to make it easy to use.
Methods: We used DynaMed systematic literature surveillance to identify meta-analyses and randomised trials for eight options. For aspirin and warfarin, we extracted relative-risk estimates compared to no treatment for ischemic stroke and for major bleeding. For clopidogrel plus aspirin, we extracted relative risk estimates compared to aspirin. For all other options, we extracted relative risk estimates compared to warfarin. We selected CHA2DS2-Vasc and HAS-BLED scores as the most accurate predictors for individual risks for embolic stroke and major bleeding, and developed an interactive form to view an individual's estimated annual risk of embolic stroke

and major bleeding with selected treatment options. We used Option Grid methods to present the results for patient use for shared decision-making support.
Results: www.WISDMforAFIB.com shows an online tool providing clinician-facing and patient-facing information. The tool includes relative risks of ischemic stroke and major bleeding with each option, absolute risks and number needed to treat or harm for clinicians, and numbers per 1000 people for patients.
Conclusions: Use of WISDM for A FIB can provide accurate, individualised estimation of benefits (in terms of embolic stroke prevention), harms (in terms of major bleeding and other complications), and burdens (descriptions of use of the treatment) to facilitate SDM.

3017
A south-to-south collaboration: Localising a global health innovation - the PACK Brazil case study

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Background: The PACK (Practical Approach to Care Kit) programme developed by the Knowledge Translation Unit (KTU) in Cape Town comprises an evidenced-based clinical practice guide covering 88 topics and an implementation strategy that aims to standardise and improve care amongst primary care health workers. To ensure applicability, it is intended for localisation to reflect local burden of disease, health-systems processes and resource constraints. In 2013, the Florianópolis municipality in Brazil began an intervention to address organisation of primary care, human resources management and scope of practice, but needed policy-aligned clinical guidance.
Objectives: To localise the PACK programme to the Florianópolis setting as part of a primary care strengthening intervention.
Methods: Over a year, the PACK programme was localised through an iterative process of adaptation and review. An in-country team received step-by-step guidance on how to localise the programme, assisted remotely by a KTU mentor. Guide localisation included detailed review of local guidelines, clinical protocols, medicine lists, and test and equipment availability. Local reviewers, clinicians and other role players were consulted. Once finalised, content was translated and guide design completed. The training programme was adapted through a similar process. Calls and visits between Brazil and South Africa occurred to review progress and plan implementation strategies.
Results: All 103 pages of the PACK Adult guide were aligned with local policies and protocols. Three new topics were added to address local health patterns and systems difficulties. Training material including training manuals, case studies and videos were adapted. Guide localisation informed local nursing protocol development and addressed system issues like referral pathways.
Conclusions: Through south-to-south mentorship, the PACK programme was successfully localised in Florianópolis, augmenting a primary care strengthening intervention. The collaboration enhanced the KTU's mentorship package and has led to a long-term relationship between the groups with collaborative learning and research possibilities.

3018
Improving the quality of clinical practice guidelines in Peru

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Background: Clinical Practice Guideline (CPG) are an important tool to improve clinical outcome and to efficiently allocate resources. Development of context-specific recommendation is important for low and middle income countries. Previous research using AGREE-2 instrument showed that Peruvian CPG were of low quality. Actions from public health sector stakeholder have been implemented to improve the quality of CPG development process in Peru.
Objectives: To describe the efforts from the public healthcare sector in the last 3 years to improve CPG quality standards
Results: In the last three years, a number of actions were implemented: 1) The National Institute of Health of Peru (NIH) proposed a new 'Guideline to develop CPG' to the Ministry of Health (MoH) (approved in September 2015), which explicitly contained recommendation to adapt and develop de novo recommendations based on the GRADE framework; 2) Jointly the NIH and the MoH, developed a CPG of Dengue which contained a number of 'de novo' recommendations formulated with GRADE (published in February 2017); 3) the Institute of Health Technology Assessment and Research (IETSI) of the Social Security (EsSalud), worked in the adaptation of 5 CPG using the ADAPTE framework in 2016 (available: http://www.essalud.gob.pe/ietsi/guias_pract_clini.html); 4) The NIH is working on adapting CPG in maternal and mental health and IETSI in adapting CPG for cancer and cardiovascular disease, and, 5) training activities were offered by the MoH, NIH, and IETSI with collaboration from external partners as Panamerican Health Organization (PAHO) and the Institute of Health Technology in Health of Colombia (IETS).
Conclusions: In a short time significant steps to improve the methodological quality of CPG were put in place, however, this will need sustain compromise by stakeholders as well as to train a larger number human resources, to build collaboration between different health sector (private and public) and to incorporate cost-effectivenes evidence.

3019

Combining evidence from observational and modelling studies to inform a breast cancer screening guideline

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Background: Clinical practice guidelines (CPG) should be based on the best scientific evidence, however for some interventions clinical randomised trials (RCT) are not available. Modelling studies is an alternative to evaluate benefits and harms in this scenario. In the context of a breast-cancer screening guideline, we conducted a systematic review of modelling and observational studies.
Objectives: To develop recommendations about the optimal breast cancer screening interval using the GRADE system.
Methods: We searched Pubmed and Embase and included modelling and observational studies which evaluated more than one mammography screening interval in average risk women. We developed evidence profiles to synthesise the evidence about effects and rated the certainty of evidence per outcome. We prioritise observational evidence when the certainty was at least similar to modeling evidence. For modelling evidence we used the ISPOR-AMCP-NPC questionnaire to assess credibility (risk of bias) and applied the rest of the GRADE domains (inconsistency, indirectness and imprecision).
Results: A total of 10 observational and nine modelling studies were included (Figure 1). Modelling studies predominantly used microsimulation technique, and were estimated for a United States population; results showed heterogeneity due to differences in assumptions and population data (Table 1 and 2). In general, annual screening offered the most number of breast cancer deaths averted but also higher harms. The tradeoff between

benefits and harms was less positive in the 40 to 49 years strata than in the 50 to 69 years' strata. Evidence was downgrade to very low quality due mainly to indirectness.
Conclusions: In the face of RCTs unavailability, the incorporation of modelling and observational evidence is a potential strategy that should be considered. Although some CPG in cancer screening have previously used this kind of evidence, the experience is still limited. A more explicit GRADE guidance is required for when to use and how to integrate modeling evidence into recommendations.

Attachments: Table 1 and 2.pdf, Figure 1.pdf

3020
Editing podcast scripts for local reality

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The Cochrane Brazil Center started a new experience in the dissemination of systematic review results. As the team felt that the podcast scripts produced in English by Cochrane could be a little bit hard for the average Brazilian to understand and follow, we started to produce two podcasts: one audio recorded according to the exact translation of the original script, sent by Cochrane, and a shorter version, edited by two journalists who are part of the Translations Team. We present here the original script, the edited script and a translation to English of the edited script (so that the Summit audience can follow the text changes). Mainly, the script was edited so that: 1) it was shorter; 2) it organised paragraphs by subject; and, 3) it was in a journalistic style, calling the attention of the listener. In the first, informal presentations we made to secondary students (teenagers), people on the streets (like bus and taxi drivers), and medical students. The shorter version was preferred and accepted as much easier to understand. We have published both versions on the Cochrane Brazil website and are waiting for results in the hit counts. The poster will show the text changes as figures, with QR codes (or bitly links) for the Summit participants to download and listen to both Portuguese versions instantly.

Attachments: Screen Shot 2017-03-13 at , 13 de março - 18.33.18.png, Screen Shot 2017-03-13 at , 13 de março - 18.34.10.png, Screen Shot 2017-03-13 at , 13 de março - 18.34.55.png, Screen Shot 2017-03-13 at , 13 de março - 18.38.20.png, podcast and miniaudio in the website.png

3021
Parenteral glutamine supplementation in critically ill adults: An approach to support evidence-informed decision making by a national Essential Medicines List (EML) Expert Committee

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Background: Essential medicines are those that satisfy a population's priority healthcare needs, and are selected by considering disease prevalence, evidence on efficacy, safety and comparative cost-effectiveness. The National Nutrition Directorate (NND) asked the Centre for Evidence-based Health Care at Stellenbosch University to review and summarise the evidence on parenteral glutamine supplementation in critically ill adults, for their submission to the National Tertiary and Quaternary Level EML Expert Review Committee on the inclusion of parenteral glutamine in the South African EML. Objective: To describe our approach to reviewing and preparing a summary of the best-available evidence to inform the EML Expert Review Committee's decision making
Methods: In consultation with the NND, we formulated an answerable question that defined our eligibility criteria. Search yields from six electronic databases (December 2015) were screened independently and in duplicate to find all eligible systematic reviews (SRs). We assessed methodological quality (validated AMSTAR tool) and extracted outcome data from all included SRs. The most recent, comprehensive SR with the highest

methodological quality was selected to form the basis the summary, which included an Evidence Profile. The risk of bias and certainty of the evidence in this review was determined using the ROBIS tool and GRADE.
Results: The findings of 12 SRs were included in the summary. Using the selected SR, we prepared an Evidence Profile providing the effect size and certainty of the evidence for seven important outcomes in critically ill patients supplemented with parenteral glutamine only. For context and comparison, we tabulated summary estimates for the seven outcomes from all included SRs and for various subgroups of patients (e.g. elective major surgery, acute pancreatitis). We submitted the summary and presented it at an EML Committee meeting.
Conclusions: Using a systematic, transparent approach to access, critically appraise, summarise and present the best available evidence, we contributed to facilitating the use of research evidence in national policy decision making.

3022
Strategic Advisory Group of Experts on Immunization (SAGE)

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Background: The World Health Organization (WHO) has a mandate to provide leadership on global policies, standards and norms and to support member countries in applying these to national programmes to improve health. In line with this mandate, the WHO Director General established the Strategic Advisory Group of Experts on Immunization (SAGE) as the principal advisory group to WHO for vaccines and immunisation.
Methods: SAGE is comprised of 15 independent experts who meet twice a year to develop recommendations on global vaccine policies and strategies for controlling vaccine-preventable diseases. Proceedings are open to partners as well as other observers, and are preceded by a comprehensive review of current scientific evidence.
Results: SAGE recommendations are evidence-based and provide the basis for WHO vaccine position papers, which inform country-level decision making and programme implementation. SAGE recommendations are also important for all immunisation stakeholders. The recommendations can be vaccine-specific or cross-cutting. SAGE has made recent recommendations regarding malaria and dengue vaccines; vaccine hesitancy and pain mitigation during vaccine delivery; etc. SAGE also provides annual Global Vaccine Action Plan (GVAPP) progress reports; and technical guidance to WHO and the Global Polio Eradication Initiative for the development and finalisation of the overall polio eradication 'endgame strategy'.
Conclusions: SAGE recommendations are having a clear and significant impact on the introduction and use of vaccines worldwide. SAGE continues to refine its operational processes with a focus on rapid dissemination of recommendations to WHO member countries and ensuring immunisation policies are coordinated within a wider framework of prevention.

3023
Review of quality-assessment tools in systematic reviews of cost-effectiveness analyses. Are checklists fit for purpose?

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Background: Cost-effectiveness analysis (CEA) is increasingly employed around the world to make reimbursement decisions. However, before constructing a de novo economic model it is important to review all published analyses. Quality assessment tools should guide the critical appraisal of CEAs and so inform model development. The Drummond checklist has been the most commonly used. However, it was developed about 20

years ago and others, more appropriate for modelling have been developed since. Nevertheless, the extent of use and usefulness remain uncertain.
Objectives: The study objective was to identify and compare quality assessment tools and assess how they are used in critically appraising CEAs in recent systematic reviews.
Methods: Eligible studies were retrieved from a set of about 15 000 records from comprehensive searches used to populate a database of all systematic reviews in healthcare. Data on quality assessment tools and methods of assessing methodological quality of CEAs, such as use of systematic reviews to parameterise models, were extracted.
Results: 30% of reviews used Drummond, 12% used CHEERS, 15% used QHES, 7% used the Philips checklist, 6% used CHEC, 7% used more than one checklist and 14% did not use any quality assessment tool. Most reviews used tools to assess transparency rather than methodological quality.
Conclusions: The critical appraisal of CEAs is not straightforward and can be subjective. Worryingly, the most commonly used tool is 20 years old and not designed for economic modelling. Other tools, designed specifically for models, such as the Philips checklist, could reasonably be regarded as more appropriate. Variation in approach to critical appraisal suggests a new instrument to assess CEA quality might be needed.

3024
Exploring the type of graphical representation of results from network meta-analysis that different stakeholders would prefer. An Italian survey

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Background: Different stakeholders, as clinicians, patients, policy makers and health information professionals, use results obtained from systematic reviews for different needs.
Objectives: To explore the type of graphical representation of results from a network meta-analysis (NMA) that different stakeholders would prefer.
Methods: We investigated how different stakeholders understand the outputs from a NMA1 and assess their helpfulness. An online national survey was conducted using an ad hoc questionnaire developed for each type of stakeholder. Results from a NMA on disease modifying drugs for multiple sclerosis (MS), including the quality of evidence evaluated by GRADE, were reported in the questionnaires. These results were represented by using network plots, tables, histograms and graphs with horizontal segments. The Italian Foundation on Multiple Sclerosis supported the project.
Results: Information on the numbers of questionnaires received for each type of stakeholder and the graphical representations used in the questionnaires are reported in the attachment. Neurologists would use the graph displaying the treatment effects by horizontal segments (36% of responders) to inform themselves, followed by the table (27% of responders); while 32% of neurologists would use the histogram to communicate the treatment benefits to people with MS, followed by the graph with horizontal segments (23% of responders). Sixty-six per cent of people with MS or their relatives would prefer to be informed by the histogram and table. Health information professionals considered the histogram and the table the most informative (44% of responders) and the most useful ways to inform their readers (56% of responders). The survey for policy makers is ongoing and results will be presented at the Summit.
Conclusions: Neurologists, people with MS and health information professionals judged the histogram and the table reporting results from NMA as the most useful source of information.

Attachments: Attachment.pdf

3025
Evidence Aid Zika Collection

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Background: A new page in the history of public health was turned when the word realised, during one of the new outbreaks of Zika virus, that infection in pregnant women could be transmitted to the foetus, causing microcephaly and, we now know, other manifestations of Congenital Zika Syndrome. The flavivirus was identified more than 60 years ago, and was not considered to be of public health importance until it started to cause outbreaks in 2007. In 2015, an epidemic of microcephaly was identified in Brazil, with space and time correlation to an epidemic of Zika; the possibility of a Congenital Zika Syndrome was suspected.
Objectives: To build a collection of healthcare evidence to provide those addressing the Zika outbreak with guidance.
Methods: We searched PUBMED, Google Scholar, TRIP database, WHO Zika Open Bulletin, PROSPERO and Twitter regularly, using the terms 'zika', 'ZKV', 'dengue' to identify systematic reviews, public health guideline or diagnostic studies. We included research evidence for the clinical and epidemiological characteristics of Zika virus; research evidence to support public-health interventions in preventing Zika or dengue virus infection and onward transmission; rapid diagnostic tests for Zika virus in the field. All articles were assessed and short summaries written.
Results: The 'Zika Collection' was published on 30 September 2016. It hosts curated freely available resources from systematic reviews about mosquito borne viruses, vector control in Dengue Virus, evidence-based guidelines from around the world, articles, and other useful information. Currently 77 articles have been identified to summarise, of which 32 have been completed and uploaded to the Collection.
Conclusions: Since publication, the Zika Collection has received just over 1000 pageviews, ranking it second (behind the EA collection for refugee health) amongst the most-viewed Evidence Aid Collections. On average, users spent 1:25 minutes on the page, suggesting the content is commanding attention. We will continue to encourage an evidence-based response to this crisis, and will report on usage of the special collection at the Summit.

3026
An evaluation of the EBM Guidelines database by French GPs

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Background: EBM Guidelines is a collection of about 1000 guidelines for primary care, produced by the Finnish Medical Society Duodecim and published online. EBMPracticeNet, a Belgian consortium of scientific and medical societies, supported by the Belgian national health insurance INAMI, translated the collection into Dutch and French, adapted it to the Belgian health system context, and made it available free of charge for all the Belgian GPs on the internet. Implementation, development, concept and licensing are provided by IVS, a Belgian company. Our hypothesis is that the content of the collection will be relevant to the French GPs.
Objectives: To assess French GPs' satisfaction about the content and the ergonomics of the collection and the relevance of information during office visits.
Methods: A sample of GPs and GP trainees will test the collection from March to June 2017. They will receive a login and a password and will be encouraged to use the collection as a point of care tool. Data will be collected from three sources: 1) the site logbook where all the connections will be tracked; 2) a short questionnaire

activated four times at random while the user searches the site, to assess the relevance of the information found and, 3) a questionnaire assessing the global satisfaction and the usability (using the System Usability Scale) after one and three months. Expected results: We have included 370 French GPs. Data collection will be completed on July 2017. We will describe: the frequency and the length of the connections, the frequency of consultation of each guideline, users' search strategies, users' satisfaction about the content and the ergonomics (comprehensiveness, relevance, accessibility, clarity of information), the proportion of searches useful for patient care. Conclusion: Our work may be the starting point for a sustainable French-speaking collaboration to share guidelines translation and updating work.

3027

Synopses of national and international guidelines as the basis for disease-management programmes

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Background: Disease-management programmes (DMPs) have been established to improve care for chronically ill patients in Germany since 2002. The German Institute for Quality and Efficiency in Health Care (IQWiG) is regularly commissioned to prepare evidence-based guideline synopses. On the basis of systematic searches for national and international evidence-based guidelines, either a need to update existing DMPs is specified or relevant recommendations for new DMPs are identified.
Objectives: To present the methodological approach for the production of guideline synopses on specific chronic diseases using the example of the guideline synopsis for a DMP 'coronary heart disease'.
Methods: After systematically searching guideline databases and websites of guideline providers, guidelines are selected following predefined inclusion and exclusion criteria. The search period covers a maximum of 5 years. DMP-relevant recommendations are extracted from the guidelines and summarised into key statements. Under consideration of the Grade of Recommendation (GoR) awarded by the guideline authors, it is evaluated which key statements could lead to a DMP update. As the guideline developers use different classification systems for the GoR, a uniform categorisation for the GoR is required to be able to compare recommendations.
Results: On the basis of the summarised key statements it is evaluated whether the corresponding recommendations are consistent with or contradict each other. It is also evaluated whether the key statements are already included in the existing DMPs and, if so, are consistent with or contradict the key statements generated from the guidelines. IQWiG subsequently provides its evaluation on whether a DMP should be updated or not.
Conclusions: IQWiG's guideline synopses form a statutory basis for the production and update of DMPs in Germany; correspondingly, these products are politically relevant. This requires a systematic and comprehensible methodological approach, but also a critical discussion of the limits of such an approach.

3028

Using a hospital evidence-based practice centre (EPC) to inform nursing policy and practice: Describing an approach

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Background: In 2006, our urban academic healthcare system created a hospital Evidence-based Practice Centre (EPC) to support the local delivery of high-quality, safe and high-value patient care. The hospital EPC provides rapid systematic reviews of the scientific literature to guide local policy and practice. In 2014, we described the general evidence synthesis activities of our hospital EPC. Here, we specifically focus on the hospital EPC's work to inform nursing policy and practice.

Objectives: Describe the evidence-synthesis activities of a hospital EPC related to nursing policy and practice.
Methods: Descriptive analysis of the hospital EPC database of rapid reviews (July 2006-June 2016).
Results: 308 reports were completed since the founding of the hospital EPC. Of these, 19% (59/308) address nursing topics and 57 nurses have been report co-authors. The majority of nursing reports (n=39) address process of care issues (e.g. strategies to reduce violence in the emergency department). Device effectiveness is the next most frequent topic (n=10; e.g. disinfecting caps for central lines), followed by policy issues (n=6; e.g. critical incident debriefing programmes to reduce nurse stress), diagnostic tests (n=3; e.g., postpartum mood-disorder screening), and drugs (n=1; locking solutions for central venous catheters). The proportion of reports relevant to nursing increased from 6% (2/35) in the centre's first two fiscal years (2007-2008) to 31% (18/59) in the two most recent fiscal years (2015-2016). Of the 59 nursing reports, 4 reports (7%) include meta-analyses conducted by the hospital EPC staff, and 14 reports (24%) contain an evaluation of the quality of the evidence using GRADE. Reports were disseminated in a variety of ways beyond direct dissemination and presentation to requestors and posting on the centre website. For example, 5 reports (8%) informed computerised clinical decision-support interventions.
Conclusion: A dedicated hospital EPC in partnership with nursing can promote a culture of EBP by serving as a resource for nurses developing and implementing EBP and working toward the ultimate goal of improved patient outcomes.

3029

Systematic appraisal of Chilean clinical guidelines included in the 'Explicit Guarantees in Healthcare' Program using AGREE II

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Background: During 2005, Chilean Health reform mandated that all healthcare providers should ensure assistance for 25 health conditions under a guaranteed system. Currently, 86 clinical practice guidelines (CPGs) addressing 80 health problems are included in the 'Explicit Guarantees in Healthcare' programme (EGH). The Health Ministry has developed CPGs, but the quality has been scarcely appraised by independent assessors so far.
Objectives: To asses quality of Chilean CPGs included in the EGH programme using the AGREE II instrument.
Methods: Four blinded reviewers assessed the CPGs using the Appraisal of Guidelines for Research & Evaluation II (AGREE II) instrument. Additionally, we appraised the validity period, last update and area (screening, diagnosis, treatment, rehabilitation).
Results: 86 CPGs were published between 2005 and 2016. Fifteen (17.4%) were updated at the declared period, 62 (72.1%) were out-dated, and 9 (10.5%) were undetermined. The overall mean score was 4.18 (±0.98). The scaled scores by domain (fig 2) were: domain 1 (scope and objectives) 79.7%; domain 2 (stakeholder involvement) 46.2%; domain 3 (rigour of development) 36.3%; domain 4 (clarity of presentation) 82.8%; domain 5 (applicability) 23.5%; domain 6 (editorial independence) 39.2% (fig 1). The items with the highest scaled score (≥80% of the maximum) were related to overall objectives specifically described, population specifically described, different options for management clearly presented, and key recommendations easily identifiable (table 1). The worst evaluated items (≤20% of the maximum) were: the views and preferences of the target population, strengths and limitations of the body of evidence, methods for formulating the recommendations, external review by experts, description of facilitators and barriers to application, and potential resource implications of applying the recommendations (Table 1).
Conclusions: Most Chilean CPGs included in the EGH programme are out-dated and show many items that should be improved mainly through a more rigorous methodology, the inclusion of patients in its development, and the appropriate consideration of its applicability.

Attachments: Figure 1.png, Figure 2.png, Table 1.png

3030

A flexible online tool for the management of complex evidence-synthesis projects

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Background: One of the possible solutions to address timeliness in the production of systematic reviews is parallelisation of tasks. However, in the context of large reviews, short times, or both, the capacity of parallelisation is limited. Even if more people can be recruited, it becomes difficult to manage the team centrally, to train new members and to keep quality control. In the context of the development of a systematic review on patient values and preferences for the venous thromboembolism guidelines of the American Society of Hematology we tested Collaboratron ™, a new tool created to facilitate these tasks.
Objectives: To describe the experience of using an online tool aimed to coordinate the work of multiple reviewers with different levels of expertise for a large systematic review.
Methods: The systematic review addressed several questions, which were to be screened simultaneously. Both teams designed workflows, and iterations, using agile methods, frequent prototypes, and quick testing these were transferred to the tool by the technology team. It was also agreed that multiple screeners with different levels of expertise, so a calibration exercise was needed, and also some way of pairing experienced and less experienced reviewers.
Results: The designed workflow consisted on four questions: is relevant? Is it about VTE? Is it about values and preferences? Is it about acceptability or implementation? (See Figure 1). Any record could be allocated to one of five mutually exclusive folders, and all of the questions could be answered yes/no/unclear. All the screeners completed a calibration sample consisting of 50 records, followed by feedback from the central team. Twenty-two people reviewed in duplicate 10,193 records, divided in two asymmetric groups (10/13 people) of experienced/less experienced screeners. The total time of screening was 19 days. There were 807 records in discrepancy which were resolved by two arbiters.
Conclusions: A flexible online tool and a close collaboration between the technological team and the guideline development team allowed to fulfill the needs of a large and complex project in a short timeframe.

Attachments: image00.png

3031

State-society relations in low-and middle-income countries: An evidence-gap map

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Background: The role of the state, the effectiveness of its institutions and its legitimacy in the eyes of its citizens are central to determining a country's prospects for stability and development. Addressing the challenges that developing countries face, promoting prosperity and ensuring that prosperity is equitably shared, requires effective governance.
Objectives: This evidence-gap map (EGM) is intended to consolidate evidence on the effect of interventions to improve state-society relations in low- and middle-income countries. It relies on systematic methods to find

effectiveness evidence and make it easily accessible. In so doing, it identifies evidence clusters and evidence gaps, and indicates where future research could focus.
Methods: This EGM identifies, categorises and displays systematic reviews and impact evaluations in a matrix that categorises evidence into intervention and outcome types. It is based on a systematic search of published and unpublished literature and the application of systematic inclusion criteria and data extraction processes.
Results: We identified 18 systematic reviews, two systematic review protocols and 365 impact evaluations – 305 completed and 60 ongoing. The number of studies being published has increased year-on-year since 2000. However, the distribution of studies across countries, regions and intervention types is uneven. For example, over half were conducted in only eight countries. Most systematic reviews examine interventions pertaining to public institutions and services; very few look at political processes, despite the relatively large number of impact evaluations in this area.
Conclusions: Although an increasing number of systematic reviews and impact evaluations addressing this topic are being published, some clear gaps in the evidence remain. There is limited or no evidence on many countries with large populations that face substantial governance challenges. Even where that evidence base is strongest, important policy questions remain. There are also important gaps in the systematic review evidence base.

3032
What are the characteristics of clinical practice guidelines for the treatment of depression?

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Background: Clinical practice guidelines (CPGs) are essential tools to guide health professionals to deliver evidence-based interventions.
Objectives: To describe the characteristics of CPGs that recommend pharmacological treatment for depression.
Methods: We conducted a systematic review of 12 specific databases for CPGs. Inclusion criteria were CPGs for the treatment of depression in primary care and that comprised pharmacological recommendations for the adult or elderly, written in English, Portuguese or Spanish, and published between 2011 and 2016. CPGs designed for local use or for a specific population were excluded. Two reviewers screened CPGs for eligibility. Data extraction was performed independently by 2 reviewers. Discrepancies at any stage were resolved by consensus between the 2 reviewers. A third reviewer was involved when needed.
Results: A total of 38 records were identified, of which 15 were eligible for this study. Table 1 describes the extracted data and Table 2 summarises these data. More than half of CPGs were from North America (53%), had the health care professionals as target users (73%), performed a systematic review (80%), did not stated clearly the method to formulate the recommendations (60%), used other method than GRADE to classify the recommendations (53%), and was funded (87%). Moreover, 9 (60%) CPGs were updated version, of which 5 CPGs did not mention the updated period and 4 CPGs were published in 2013 or before. None CPGs had mentioned patients as the target user.
Conclusions: Our data suggest that CPGs presented high rigour to search and select evidence to support the recommendations. However, CPGs developers should improve the statement to formulate the recommendations and adopt the GRADE system to classify the recommendations.

Attachments: table 1.pdf, table 2 .pdf

3033
Assessment of the reporting quality of clinical practice guidelines using CheckUP list/tool

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Background: Medical practice is constantly changing due the continuous emergence of new evidence of treatments. Clinical practice guidelines (CPGs) are an important tool used in the medical practice and it's important to be updated to assure that the best recommendations are available. Therefore, we presented a reporting quality evaluation of 10 updated CPGs using the CheckUp list.
Objectives: To assess the reporting quality of updated CPGs that recommend pharmacological treatment for depression using the CheckUP list.
Methods: We conducted a comprehensive search on 12 specific databases. Inclusion criteria were: CPGs for the treatment of depression in primary care, that comprised pharmacological recommendations for the adult or elderly, written in English, Portuguese or Spanish, published between 2011 and 2016, and were updated versions. CPGs designed for local use or for a specific population were excluded. Two reviewers first screened CPGs titles for eligibility. Then, another reviewer assessed each full-text CPGs for inclusion criteria. Discrepancies were resolved through discussion between the reviewers. We used the CheckUP list to assess the reporting quality in updated guideline. Two reviewers evaluated the selected CPGs and the discrepancies were resolved through consensus. We classified as high reporting quality CPGs which presented 70% or more of positive checks. CPGs which presented 40% or less of positive checks were classified as low reporting quality.
Results: The search strategy retrieved 38 records, of which 10 were evaluated using the CheckUP list. Only 3 CPGs were classified as high reporting quality and 5 CPGs were classified as low reporting quality (Table 1). The issues in which the most failed updates were mostly related to clearly reporting what and how was updated (Figures 1 and 2). The items that received more answers 'unclear' (both 60%) talked about financing (9) and implementation (15).
Conclusions: Our data suggests that CPGs developers should improve the reporting quality of the CPGs updated versions to clarify health professionals regarding the modifications conducted.

Attachments: Figure 1 Rafa.tif, Figure 2 Rafa.tif, Table 1 Rafa.pdf

3034
Evidence based toolkits for enabling evidence use

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Background: Policy and practice decisions may be made on the basis of many different factors including politics, contexts and resources, yet there is an increasing expectation that research evidence should be used as one source of information in the decision-making process. Formal research methods are used to undertake and synthesise research yet many of our approaches to enable the use of research evidence are themselves not evidence based. The aim of this project is the development and evaluation of evidence informed toolkits to enable research use. The project builds on the Wellcome Trust funded Science of Using Science project (SoUS) (Langer et al. 2016) which created a conceptual framework for understanding 'research to use' processes and reviewed the evidence of the effectiveness of different strategies to increase research use.
Objectives: To develop evidence-based toolkits to suport both researchers and users of research in: (i) enabling the use of research in decision making; and, (ii) to monitor and assess the extent of such research uptake strategies, activities and outcomes. The aim to enhance the capacity among creators and users of research and their organisations to identify, plan, track, and articulate the actual and potential uptake of research.
Methods: A systematic review of research on effective strategies to increase research use plus a conceptual analsyis of the evidence use process was used to develop two evidence-based toolkits; one aimed predominantly at researchers and one aimed predominantly at policy makers.
Results: The draft toolkits and pilot evaluation of their use will be presented
Conclusions: In progress at the time of abstract submission.

3035

Evidence-informed decision making in achieving universal health coverage: The role of the Evidence Informed Network (EVIP-Net) in Africa

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Background: Health policy makers all over the world are facing critical issues in respect of health costs, access to healthcare, and quality and outcomes of healthcare that require evidence-based solutions (www.academyhealth). Evidence-informed health policy making is an approach that aims to ensure that decision making is well-informed by the best-available research evidence (www.who.evipnet.com) For this purpose, the Network of Evidence-informed Policy Making (EVIP-Net), a WHO sponsored evidence-to-policy partnership, was established among 11 sub-Saharan African countries in 2006. (www.who.evip-net.com).
Objectives: To review capacity building, synthesis of priority areas of evidence, and best practice by EVIP-Net African countries.
Methods: Review of WHO-EVIP-Net and other database search was conducted in May 2016 to assess capacity-building, available evidence briefs, best experiences among EVIP-Net African countries.
Results: Drawn from the different stakeholders, 1200 people were trained trough 61 capacity-building workshops. During 2011-14, 37 evidence briefs were prepared among the 11 EVIP-Net African countries. Of the evidence briefs, 45.9% were about improving maternal & infant health, human-resource provision in remote areas and nutrition, 13.5% dealt with improving patients' safety, quality of care, palliative care and about mental health and 10.8% dealt with improving health care financing, 18.9% of the evidence briefs were not completed as of 2014. 10.9% of the evidences were not in English and were excluded from review. -response mechanisms and clearing houses in Uganda amounted to best practice among EVIP-Net African countries.
Conclusions: Extending of the evidence synthesis to the non-covered population, other health services and giving special focus on reducing cost sharing and fees. Evidence-informed policy making is essential in achieving the UN commitment's 'to leave no one behind'. There for, evidence synthesis should also give focus on mechanisms to reduce health inequalities among populations. Uganda's clearing house in providing access to health system evidence should be replicated in other EVIP-Net countries

Attachments: Poster.pdf

3036

Developing evidence-based guidelines for infectious and neglected tropical diseases in Brazil

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Background: Neglected Tropical Diseases are a group of infectious diseases that receive little or no research fund and treatment investment around the world. These diseases, added to other infectious diseases, such as tuberculosis, malaria and toxoplasmosis, represent an important cause of morbidity and mortality in low-income countries. Brazil has a significant number of people affected by these diseases but had not yet developed evidence-based guidelines with this focus.
Objectives: To describe the prioritisation and development process conducted by the Brazilian Ministry of Health for the development of evidence-based clinical guidelines for infectious and neglected tropical diseases.
Methods: Descriptive case study
Results: The process of developing guidelines for infectious diseases encounters difficulties in the use of systematic methods for elaboration and a need for less time for the document completion. Submission of the

proposed scope to online public consultation has shown to be an important tool to incorporate society's demands on guidelines development process. At the end of the process, with the publication of these guidelines, it is expected to standardise methodologies and offer better treatment options for patients with neglected diseases and infectious diseases in Brazil.
Conclusions: The process of developing guidelines for infectious diseases encounters difficulties in the use of systematic methods for elaboration and a need for less time for the document completion. Submission of the proposed scope to online public consultation has shown to be an important tool to incorporate society's demands on guidelines development process. At the end of the process, with the publication of these guidelines, it is expected to standardise methodologies and offer better treatment options for patients with neglected diseases and infectious diseases in Brazil.

3037

Developing a published evidence map as a tool to identify and prioritise intervention types in Type-2 Diabetes management

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Background: Published evidence mapping using systematic review methodology is an emerging important tool to identify and prioritise future research and intervention in broad topic areas.
Objectives: To develop an evidence map and identify interventions for prioritisation from the matrix findings, and compare publication gaps at domestic and global level in type-2 diabetes management.
Methods: To develop and provide an evidence map, a 3-staged process is executed. First, the context of evidence matrix was defined. The horizontal axis consisted of 6 types of study design and vertical axis consisted of 11 single type of intervention and multiple interventions. Second, to search and select relevant studies, we conducted two systematic searches using 4 Korean (KoreaMed, Kmbase, RISS, NDSL) and 3 global databases (Cochrane, Embase, PubMed). Third, data extraction and reporting on yield was performed including study characteristics, interventions and study design.
Results: We identified 207 international publications including 24 SR or meta-analysis (11.6%), 103 RCTs (49.8%), 25 quasi-experimental (12.1%), 14 cohorts (6.8%), and 17 one group before-after studies (8.2%). 48 Korean publications met inclusion criteria; 1 SR or meta-analysis (2.1%), 2 RCTs (4.2%), 31 quasi-experimental (64.6%), 0 cohorts (0.0%), and 9 one group before-after studies (18.8%). 19 of 207 (9.2%) for international and 18 of 48 (37.5%) for Korean publications were single intervention evidences. There were only two types of single intervention (education and training, screening) amongst Korean publications compared to those of international. International evidence matrix shows other single interventions such as self-management, counselling or consultation, reminder or prompts, mass media, policy approach or supportive environment with high quality of study designs.
Conclusions: Evidence mapping is one of categorisation systems. It can identify evidence gaps, inform future research topics or areas, and help to design effective interventions.

3038

The evidence base is one part of the story when developing clinical guidelines

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Background: Development of a short evidence-based clinical guideline on obesity in Malta.
Objectives: To develop recommendations around two clinical areas; bariatric surgery and pharmacology for the treatment of obesity in Malta with Maltese healthcare professionals.
Methods: The guideline topic of obesity was selected by the Maltese healthcare professionals; the guideline group of healthcare practitioners was convened. Questions on bariatric surgery and pharmacology were based on the NICE obesity guideline (CG189) 'Obesity; identification, assessment and management of overweight and obesity in children, young people and adults.' and group agreed to update the evidence base. Systematic reviews were presented to the group for discussion to base recommendations on.
Results: Interpretation of the data on effectiveness and risks were similar to that made by other committees using this evidence base, however, recommendations were drafted that were seen as suitable to the economic context. Differences included; agreeing not to put pharmacological therapy on the national formulary, increasing the range of BMI in which treatment should start, due to the increased number of people with obesity in Malta. The language used to write the recommendations was also altered from that which is the preferred style in NICE guidelines. Conclusion: Interpretation of the data was similar but the parameters for formulation of recommendations were dependant on the epidemiology of obesity in Malta, resource availability and the overall cultural context. Participants were very clear that to have a lower BMI for treatment to commence would be overwhelming for services. The style of writing was considered to be inappropriate with concern being raised that the meaning of the recommendation would be lost as such a style did not 'translate' to the Maltese environment. The recommendations were contextualised, with an understanding of not only of the language and healthcare demographics, but knowing how to target and focus the recommendations to achieve successful implementation.

3039

Tools for sharing evidence for effectiveness from a systematic review of complex interventions to improve food security: Which do policy makers prefer?

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Background: We are completing an equity-focused review of community interventions to improve food security. At study onset, we assembled seven policy makers at regional, national and international levels; and they provided input into several aspects of the review. The review and the interventions within it are complex; we need to share results in ways that are clear, attention-grabbing and relevant.
Objectives: 1)To compare ways of presenting results to policy makers; and, 2) to understand the impact of involving policy makers in data interpretation.
Methods: We followed standard Cochrane procedures for the review. Synthesis methods included Random Effects meta-analysis and narrative synthesis with Effect Direction plots to visualise data. To ensure that our Advisory Group has input into data interpretation and knowledge translation, we are holding a 'Data Dive' workshop in May 2017.
Results: Searches retrieved 26 178 articles. After culling by title, we screened 2456 abstracts; 507 articles were reviewed in depth and 40 studies were included. Ten assessed the impact of the US WIC program, another concerned income supplementation for pregnant mothers in Canada. Seven studies assessed Meals on Wheels, nine assessed vouchers or rebates for fruits and vegetables. The remainder assessed the impact of Food Stamps, healthy corner stores, new supermarkets in deprived areas, a novel food pantry and the Good Food Box. Effectiveness varied by intervention, process factors and outcome. For example, we found a significant effect of

rebates on purchase of fruits and vegetables; those who received them purchased 818 grams more of fruits and vegetables per week (95% CI 147.5, 1488.1). At the Data Dive, we will study reactions to different ways of presenting evidence, including data placemats, infographics, forest plots and Effect Direction plots. We will incorporate Advisory Group interpretations of the evidence and policy relevance into the review.
Conclusions: This presentation will highlight data-presentation tools that were most attractive to policy makers; we will also discuss the ways in which we incorporated Advisory Group Input.

3040
Accelerated developed guideline (ADG) on cardiovascular risk prevention and dyslipidaemias management

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Background: Health Insurance and General Practitioners (GPs) Society asked HAS' for recommendations on the use of lipid-lowering drugs for hypercholesterolemia management, mainly for GPs due to the obsolescence of the national clinical practice guideline (CPG) and publication of international CPGs with different positions.
Objectives: To develop an ADG on lipid-lowering drugs for hypercholesterolemia management.
Methods: The process consisted of an analysis and synthesis of international CPGs internally conducted with the help of a restricted working group (WG) to draft recommendations and consultation of stakeholders.
Results: Even with the notion of a restricted WG, we had difficulty recruiting cardiologists without conflicts of interest. It slowed down the process and may have somewhat limited the expertise. The scope of the guideline was enlarged to combined hyperlipidaemia, hypertriglyceridaemia, and heterozygous familial hypercholesterolemia for covering the main dyslipidaemias. Furthermore, emphasis was placed on the assessment and management of overall cardiovascular risk. The data analysed were numerous: about fifteen CPGs, a few meta-analysis, and studies about risk estimation in French population. There were some differences between CPGs on certain aspects of the management, and controversy, especially on the interest of lipid-lowering drugs in subjects with lower cardiovascular risk. Otherwise, some medical societies did not play their role in reviewing texts. In total, the development of this ADG required four WG meetings, which is relatively low, but lasted two years, which is comparable to the theoretical period of a standard CPG.
Conclusions: The need to produce quickly a guideline about a controversial subject led us to produce an ADG. Despite the reluctance of key stakeholders and the extent of the topic, we succeeded in producing it, in particular through a high implication in the internal development of an evidence report summarising existing recent guidelines. The time of development of this CPG would probably have been longer with the standard method.

3041
Therapeutic Guidelines Developing Countries Programme

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Background: Therapeutic Guidelines Limited (TGL) provide concise, independent, evidence-based recommendations for patient management. Supported by Therapeutic Guidelines Foundation, the Developing Countries Programme expanded in 2016 to further promote the offer of access to TGL guidelines free-of-charge to those working in low- and middle-income countries, and provide assistance to the development of local standard treatment guidelines.
Objectives: To improve access to high-quality, independent information on the best-available drug therapies, TGL offers health professionals from low- and middle-income countries: Access to Therapeutic Guidelines free of charge; and, guideline development resources and capacity building to support the development of local standard treatment guidelines.

Methods: Access to Therapeutic Guidelines content is provided free-of-charge via books, subscriptions to eTG Complete online and the newly released offline App version of eTG Complete. Other guideline development resources offered by the Developing Countries Programme include: A Guideline Development Manual tailored to the low-resource context Access to Australian health professionals via the Expert Clinician Register for clinical support during the guideline development phase Access to capacity building programmes delivered in country or via the Visiting Editor Programme to learn the TGL guideline development process
Results: Data collected since April 2016 will be presented to illustrate the number and professional background of individuals that have requested access to TGL guidelines, the reasons TGL guidelines are needed, and the types of assistance that local health professionals need to support their guideline development programmes.
Conclusions: The volume and nature of requests for access to TGL guidelines and locally tailored capacity building programs suggests access to affordable health resources and staff with appropriate expertise remains inadequate in low-resource settings. Although the Developing Countries Programme is relatively new there appears to be a demand for support to produce high-quality, evidence-based, contextually appropriate guidelines.

3042

Impact of cut-offs on guideline synopses for the preparation of disease-management programmes

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Background: In Germany, the Federal Joint Committee commissions the Institute for Quality and Efficiency in Health Care (IQWiG) to assess evidence-based guidelines and prepare guideline synopses in order to identify relevant recommendations for disease management programmes (DMPs). The Appraisal of Guidelines for Research & Evaluation (AGREE) II tool is used to assess the (methodological) quality of guidelines. It consists of 23 appraisal criteria with 7-point scales in 6 independent domains with standardised scores between 0 and 100%, higher scores indicating better quality.
Objectives: To apply different cut-offs for guideline quality and evaluate their impact on the guideline pool and on the statements regarding DMP relevance in the guideline synopses, as well as to evaluate whether the use of fixed cut-offs leads to a loss of information on healthcare aspects.
Methods: We considered 4 guideline synopses on chronic heart failure (IQWiG Project V14-01), rheumatoid arthritis (V14-02), osteoporosis (V14-03), and chronic back pain (V14-04). Several publications using cut-offs to distinguish guidelines by means of their quality were identified. These cut-offs were based on standardised domain scores for individual domains or on the assessment of overall guideline quality. We applied these fixed cut-offs to the 4 synopses.
Results: The synopses included 6 to 22 guidelines with 195 to 996 recommendations. Depending on the respective cut-off, between 0 (0%) und 16 (72.7%) guidelines and between 1 (0.1%) und 700 (70.3%) recommendations were omitted. Between 0 (V14-04) and 12 (V14-01) changes to DMP relevance were reported in the conclusions of the guideline synopses. Due to the use of a cut-off, between 0 (V14-02) and 6 (V14-01) healthcare aspects were lost.
Conclusions: When using cut-offs to determine guideline quality, it should be considered that high cut-offs may considerably limit the conclusions of guideline synopses, but this is not reliably predictable. Even though cut-offs can distinguish between high and low-quality guidelines, at the same time statements on certain healthcare aspects may be completely lost.

3043

Development of a clinical guideline about postmortem radiology, including the perspective of relatives and development of a network

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Background: Postmortem radiology, a non-invasive method to diagnose the cause of death, is a relatively new topic in practicing postmortem diagnostics in Dutch hospitals. Postmortem imaging can be seen as an addition to, or even alternative to autopsy, when autopsy isn't desirable or suitable. Therefore, more hospitals than the few that are nowadays, should be able to perform postmortem radiology and to qualify the postmortem images. Besides, postmortem radiology can be experienced as an important instrument to measure quality of health care practices.
Objectives: To enhance the performance of postmortem radiology in The Netherlands, a clinical guideline was developed. A specific component in developing the guideline was the integration of the perspective of relatives of deceased patients that underwent postmortem radiology/diagnostics, and the development of a network of radiologists.
Methods: Besides literature searches to find the most up-to-date evidence on postmortem radiology in three categories of patients: fetuses, children and adults, 'patient' perspective was integrated throughout the guideline. Via a patient panel, designed by the Federation of Patient Organizations in The Netherlands, relatives of deceased adults/children that underwent postmortem diagnostics (either autopsy or radiology) where approached to give their opinion in a focus group. To implement postmortem radiology in hospitals, a network of specialised and experienced (postmortem) radiologists is developed on a national scale to offer assistance in assessment of postmortem scans and the organisation of postmortem radiology in hospitals on a regional level.
Results: The result is a clinical guideline on how to organise and implement postmortem radiology in (Dutch) hospitals and a national network of (postmortem) radiologists.
Conclusions: The clinical guideline postmortem radiology is an example of how evidence combined with expert and 'patient' opinion can be used in implementing and improving healthcare practices.

3044

The Malnutrition in the Elderly (MaNuEL) Knowledge Hub: Tackling the increasing problem of malnutrition in older persons

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Background: Malnutrition in older people is an increasing health problem, mainly due to the changes in demographics in developed countries. It is associated with serious functional and health problems, which affect

well-being and quality of life of the individual but also increase costs and burden for our healthcare systems.
Objectives: In order to tackle the increasing problem of malnutrition (i.e. protein-energy malnutrition) in the older population, the Joint Action “Malnutrition in the Elderly (MaNuEL) Knowledge Hub” was launched as part of the Strategic Research Agenda of the Joint Programming Initiative (JPI) 'A Healthy Diet for a Healthy Life (HDHL)'.
Methods: MaNuEL is a consortium of 22 research groups from 7 countries (Austria, France, Germany, Ireland, Spain, the Netherlands and New Zealand) that is advised by a stakeholder board of experts in geriatric nutrition. Five interconnected work packages focus on defining treatable malnutrition, screening of malnutrition in different settings, determinants, prevention and treatment of malnutrition, and policies and education regarding malnutrition screening and treatment in older persons across Europe. Systematic reviews and secondary data analyses are performed to describe the present fragmentary picture on malnutrition and to identify potential knowledge gaps. Dissemination and implementation of results relevant for clinical practice will take place through publications in scientific journals, presentations at scientific congresses as well as reports and recommendations which will be distributed to relevant national and international organisations. To support clinical practice, a toolbox containing relevant information about screening for malnutrition in different settings based on valid screening tools, and the most effective prevention and treatment strategies for malnutrition in older persons, will be made available on the HDHL website.
Conclusions: MaNuEL aims to extend scientific knowledge, to strengthen evidence-based practice in the management of malnutrition in older persons, and to build a transnational competent network of experts for future harmonised research and clinical practice.

3045
Network meta-analyses in clinical guideline development for cutaneous Lyme borreliosis

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Background: Clinical guidelines are developed through a 'multi-step process' that ensures that guidelines are feasible within the current clinical environment and that they are based on the best-available evidence. For example, for the treatment of erythema migrans (EM), the typical clinical sign of early skin infection in Lyme borreliosis (LB), the first line therapy is antibiotic treatment. However, controversies about the choice of the antibiotic agent, dose and length of treatment exist between different studies and recommendations.
Objectives: Due to competing interventions that have not been directly compared in studies for patient-relevant outcomes in the treatment of EM we made quantitative comparisons of interventions using network meta-analysis (NMA) to inform evidence-based treatment recommendations.
Methods: NMA’s were calculated with a frequentist approach using the R-package netmeta (Rücker et al.). Furthermore, we used the GRADE (grading of recommendations, assessment, development and evaluation) guidance on NMA to support decision making.
Results: Our evidence is based on 21 randomised-controlled trials. NMA for children and juveniles revealed no statistically significant differences between the different antibiotic agents and regimens for any outcome of interest. In adults, evidence from NMA suggested the lowest risk for retreatment was with the antibiotic agent azithromycin in comparison to doxycycline (OR 0.30, 95%-CI [0.10; 0.92], n=10 studies). Penicillin V regardless of dosage and treatment duration was the antibiotic with the lowest risk for any adverse event in comparison to doxycycline (OR 0.20, 95%-CI [0.06; 0.66], n=13 studies). Overall, quality of evidence was low or very low. The major uncertainty was the size of the effect estimate and a high risk of selection and detection bias in the included study pool.

Conclusions: NMA provides a useful tool when comparing competing interventions. However, some challenges in relation to the network connectivity, consistency and similarity of studies with respect to study design and populations remain in the use of NMA in guideline development.

3046

Two-year follow up in a breast-screening decision aid RCT: Retention of overdetection knowledge and other decision-making effects

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Background: Supporting women to make well-informed decisions about breast-cancer screening requires effective communication about screening outcomes including overdetection or overdiagnosis (diagnosis and treatment of cancers that would never become clinically evident).
Objectives: We investigated the effects of providing information about overdetection in a decision aid for women aged around 50 considering breast screening. Immediate post-intervention results (reported previously) showed that the intervention increased knowledge and informed choice, made screening attitudes less positive and reduced intentions to screen. We now present 2-year follow-up data.
Methods: We did a community-based RCT in Australia with a random cohort of women aged 48-50 who had not undergone mammography in the past 2 years and had no personal or strong family history of breast cancer. We randomised 879 women to receive the intervention decision aid (evidence-based information on overdetection, breast cancer mortality reduction, and false positives) or a control decision aid (identical but without overdetection information). Two years later we assessed women's knowledge, attitudes and future screening intentions, plus screening uptake.
Results: 712 women (81% of those randomised) completed 2-year follow-up. Compared with controls, more women in the intervention group retained adequate conceptual knowledge (34% vs. 20%, p<.01). Groups were similar in the proportions of women who expressed positive attitudes to screening (81% vs. 82%, p=.66), underwent mammography during the 2-year follow-up period (50% vs. 51%, p=.75) and reported intending to screen within the next 2-3 years (82% vs. 85%, p=.25).
Conclusions: A brief decision aid led to long-lasting improvement in women's understanding of potential consequences of breast screening, including overdetection. Few previous decision-aid trials have demonstrated an impact persisting over such a long timeframe. Although screening intentions were lower in the intervention group than among controls immediately post-intervention, after 2 years we have not observed an effect on mammography uptake nor future breast-screening intentions.

3047

Validation of a questionnaire to measure people's ability to assess claims about treatment effects in Spanish

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Background: Every day people are faced with claims about treatment effects through the mainstream media, social media, or from family and friends. Such claims may include advice on how to prevent illness, or about the effects of treatments, or public-health interventions. Enabling people to make informed decisions about health and healthcare by improving their ability to critically assess such claims is an important public-health initiative. The Claim Evaluation Tools (CETs) consists of a set of multiple-choice questions (MCQs) that can be used for

assessing people's ability to assess such claims. Objective: To describe the psychometric testing using Rasch analysis of a sub-set of multiple-choice questions taken from the CETs database in Spanish-speaking populations in Mexico.
Methods: We used purposeful sampling and included 172 children (10-15 years old) and 268 adults. A set of 22 MCQs were translated from English to Spanish, and the final questionnaire was applied to adults as an online questionnaire and to children in two middle schools. We explored the overall Item-Person Interaction as well as individual item and person fit. We also tested the items for potential item differential functioning (based on gender, age and mode of administration), and for dimensionality and local dependency.
Results: The item-person interaction and fit to the model was satisfactory (Figures) with a mean fit residual of -0.0643 (SD 0.60). The mean location of person's ability is 1.348. Based on t-tests the MCQs were found to be satisfactory unidimensional, and there was no important local dependency suggesting that there is no redundancy in the MCQs. The reliability was found to be satisfactory with a Person-Separation-Index of 0.7, and the MCQ's ability to discriminate between respondents was good overall. Conclusion: Based on the findings from the Rasch analysis, a final set of 18 MCQs with satisfactory fit to the Rasch model was selected. This is the first set of tools available in Spanish to measure people's ability to assess treatment claims. The MCQs set is freely available for non-commercial use and can be used for educational or research purposes.

Attachments: Fig 1 Item-person interaction children.png, Fig 2 Item-person interaction adults.png

3048
Reporting of updating process in updated clinical guidelines: A systematic assessment

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Background: The Checklist for the Reporting of Updated Guidelines (CheckUp) has recently been developed as a tool to evaluate the completeness of reporting the updating process in updated clinical guidelines (CGs). However, the reporting of updated CGs has not yet been systematically assessed yet.
Objectives: 1) To assess the completeness of reporting the updating process in a sample of updated CGs; and, 2) to explore the inter-observer reliability of the CheckUp.
Methods: We performed a systematic search to identify updated CGs, with a systematic review of the evidence, including at least one recommendation, and published in 2015. Three independent reviewers assessed each included CGs using CheckUp. This checklist includes 16 items that address 1) presentation of an updated guideline (6 items;2) editorial independence (3 items); and, 3) methodology of the updating process (7 items). We calculated the median score per item, per domain, and overall. We determined the intraclass coefficient (ICC) and 95% confidence interval (95% CI).
Results: Sixty CGs were included. The median score per domain was 3 (range 1-6) for presentation, 2.5 (range 0-3) for editorial independence, and 4.5 (range 0-7) for methodology. The median overall score was 10 (range 5-16). CGs developed by a European or international organisation obtained a higher overall score compared to American and Asian ones. The overall agreement among the three reviewers was adequate (ICC 0.88; 95% CI 0.75-0.95).
Conclusions: The reporting of updating process in updated CGs is suboptimal. CheckUp can be used to inform guideline developers to improve the reporting of updated CGs.

3049
Systematic review of research using insurance claim data in Korea

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Background: Korean health insurance claim data has accumulated 15 years of medical use data of whole nation. All medicines, procedures and activities are recorded in accordance with fee for service under NHIS (National Health Insurance Service). The health examinations and cancer screening data for all citizens are also included. Recently, a database for research has been established and a variety of big data studies are being conducted.
Objectives: The purpose of this study is to provide a systematic review of the current state of research using the claims data of Korean health insurance.
Methods: We conducted a systematic search using the keyword 'Health insurance' and 'Korea' using Pubmed and 9 Korean literature databases such as Koreamed. Year, disease, theme, research method, and compared the definitions of each variable used in the study.
Results: A total of 1252 papers were selected, published since 1987, and began to increase since 2005, with 289 published in 2016. The most common themes were 123 articles of cancer. Number of articles about infection is 56 and cerebrovascular disease is 52. The study on medical expenses and medical use without disease classification was classified into general health policy and articles about this theme are 232. Patient definition was analysed for cardiovascular disease and varied according to the paper.
Conclusions: There is a lot of research using health insurance data, which makes it possible to do various analyzes with less expense and effort than patient research. However, the problem is that the research method is not standardised and the patient definition is not accurate due to limitations of the claim data. Therefore, if data analysis criteria and precautions are presented by analysing existing research methods and results, it will be possible to improve the quality of research and enhance the utilisation of policies in the future.

3050

Preclinical requirements in 114 EMA and 120 FDA therapeutic area guidelines: Helpful for trialists, evaluators, and meta-research?

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Background: A crucial prerequisite for designing and reviewing phase I/II trials is sufficient knowledge about what preclinical studies are needed to demonstrate efficacy and safety. The relevant preclinical questions to be answered depend strongly on the studied disease, the drug target, pathophysiology, and other aspects. However, Good Clinical Practice guidelines such as the ICH E6 address rather general scientific requirements, but they do not help to determine the relevant preclinical efficacy and toxicology studies for a specific disease or therapeutic area. Therapeutic area guidelines (TAG) published by EMA and the FDA define requirements to be fulfilled when launching a trial in a certain indication. TAG could play an important role for improved structure, efficiency, and transparency in translational research, but have not been studied systematically for their utility in this regard.
Objectives: This study aimed to 1) determine the full sample of TAG from EMA and FDA; 2) assess the intersection of TAG topics; and, 3) assess and compare their content for preclinical requirements.
Methods: EMA and FDA websites and databases were systematically searched for TAG. All included TAG were thematically clustered. A mixed-deductive and inductive approach was applied to analyse content on preclinical requirements.
Results: A total of 114 EMA and 120 FDA TAG could be identified, covering 126 distinct topics. Guideline topics are diverse, ranging from common diseases to orphan diseases. Fifty-seven (50%) from 114 EMA and 55 (46%) from 120 FDA TAG do not mention any preclinical requirements. TAG show a strong variation in extent, nature, and level of detail.
Conclusions: Our findings indicate that TAG do not sufficiently inform sponsors or clinical researchers on preclinical requirements for launching early clinical trials in specific therapeutic areas. For the sake of transparency and public accountability, EMA and FDA should set minimum standards in TAG for preclinical requirements. This would facilitate both the assessment of trial applications and limit the conduct of trials with

limited prospect of clinical promise or other relevant knowledge gain.

3051
Re use of extracted data – an ontology-based approach

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Background: One of the three principle aims of the Guidelines International Network (G-I-N) is to assist in "reducing duplication of effort and improving the efficiency and effectiveness of evidence-based guideline development, adaptation, dissemination and implementation (http://www.g-i-n.net/about-g-i-n/introduction). This is also an important issue for triallists, journal editors and other evidence-based medicine researchers, Much progress has been made in this area with the availability of statistical data from Cochrane reviews to support re-use, and the number of evidence table templates that are freely available. However, harnessing all this work to enable quick and easy sharing of all extracted data is still a challenge. Indeed, one of the challenges NICE has faced in updating its own guidelines is that advances in methodology for example GRADE means that evidence tables from original guidelines are no longer fit for purpose. As a result of this NICE, in 2016, adopted EPPI-Reviewer (https://eppi.ioe.ac.uk/CMS/) as its preferred tool for use while carrying out systematic reviewing task including data extraction. This provides a unique opportunity to build on existing data-sharing functionality to develop and ontology for extracted data with particular attention on baseline characteristics.
Objectives: To develop an ontology for extracted data based on commonly extracted data in national guidelines to facilitate re-use of all extracted data.
Methods: We will 1) perform a retrospective analysis of all 28 public health, social care and clinical guidelines published by NICE in 2016 with a view to identifying a minimum dataset extracted, how it is reported (text or numeric), units used if numeric and related qualifiers; and, 2) develop an ontology for data extraction for use in EPPI-Reviewer for all extracted data.
Results: To be presented and shared at the Summit.
Conclusions: To be presented and shared at the Summit.

3052
Taking the informative value into account; the FIT-tool for a priori determination of the informative value of evidence

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Background: The Dutch National Health Care Institute (NHCI) assesses evidence on the effectiveness of interventions for the purpose of reimbursement decisions. In this context the NHCI developed the FIT-tool (Feasible Information Trajectory). Tool: The FIT is a computerised tool that starts with several questions about the population, intervention, control, outcomes, timing and setting (PICOts) under study. FIT translates the answers to these questions into a need for specific research, i.e. a series of feasible research characteristics that, when all are met, would outline the optimal research design. The tool then calculates the so-called FIT-score; the distance between the feasible characteristics as determined by the tool and the actual characteristics of a study in the body of evidence. The FIT-score is expressed as a continuous value between 0 and 1. A high FIT score signifies that a study closely meets the research needs and therefore can be considered to be of high informative value. In contrast, a low FIT-score signifies a research gap. Discussion: The FIT-tool helps to identify knowledge gaps and gives insights in how these gaps can be ,if at all. This is the very reason for the tool's coming into existence. However, other possibilities for use can be suggested; those studies with the highest FIT-scores may be selected

for assessment whilst the lower scoring ones are excluded. Or even weighing the included studies according to their information values in a meta-analysis may be a line of further investigation.

3053

Streamlining communication of Cochrane content between three German language Cochrane entities under an international umbrella

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Background: In line with Cochrane's Strategy to 2020 aim to make evidence more widely accessible for local populations, the German-speaking Cochrane centres (Germany, Switzerland and Austria) cooperate in translating and disseminating Cochrane contents. They produce journalistic quality, plain language content for a blog and social media.
Objectives: To disseminate, under the Cochrane international umbrella yet adapted to local specificities, Cochrane content in three German-speaking countries via multiple media channels.
Methods: We streamline our communications with that of Cochrane International. To disseminate Cochrane content in German language we use four channels 1) Cochrane Kompakt containing translated Cochrane plain language summaries, 2) Wissen Was Wirkt: a German language blog, 3) social networks (Twitter and Facebook) with short messages; and, 4) our websites on a regular basis. Blogshots and press releases provided by Cochrane are translated by dedicated volunteers or centre staff and build the basis for our content. We monitor the access to all websites and the impact of all posts either manually (Twitter) or via Google analytics (blog) and Facebook Insight.
Results: As of February 2017 we published 1040 translated Cochrane plain-language summaries. From May 2015 to January 2017 we posted 97 edited journalistic blogposts. On average this translates into one blogpost per week. We started an intensified communication strategy in January 2017 and, since then, post daily on Twitter and Facebook. According to Google Analytics our Blog reaches about 1000-2000 visits per months (max. 4000 visits per month). There are 649 total facebook page likes and 448 followers on twitter for our dissemination channels.
Conclusions: To produce high-quality content for the blog and social media and to coordinate activities between three Cochrane centres is time consuming and needs designated resources on a very constant basis. The blog is a good channel to distribute Cochrane content. Streamlining the communication of Cochrane content and cooperating in its dissemination through a variety of channels allows for using synergies and efficient processes.

3054

Automating RCT identification can identify more than 99% of RCTs included in Cochrane reviews and could reduce manual screening by 77%

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Background: The identification of RCTs for inclusion in Cochrane reviews is an extremely labour-intensive task. Machine learning may be able to reduce the manual burden of study identification, and previous evaluations have shown that recall of more than 99% is attainable whilst excluding more than 75% of citations automatically; leaving less than 25% for manual checking.
Objectives: To evaluate the performance of a machine-learning classifier to reduce manual workload in screening in terms of the burden of screening saved and the 'cost' in terms of relevant studies being erroneously excluded.

Methods: A machine-learning classifier was built to distinguish between RCTs and non-RCTs using more than 280 000 records from the Cochrane Crowd. In January 2017, the classifier was applied to all 94 305 citations to studies included in published Cochrane reviews that had an inclusion criterion of including RCTs only. Records with no abstract were counted as 'identified' on the assumption they would have been manually checked.
Results: The classifier and assumed manual checking of records which did not have abstracts correctly identified 93 536 RCTs, leaving 769 records as potentially 'missed'. The 'missed' RCTs were included in 510 (11.41% of reviews) with most reviews 'losing' one or two RCTs (366 and 92 respectively); and two reviews 'losing' 13 RCTs.
Conclusions: The RCT classifier and the manual checking of records missing abstracts can obtain a high recall of more than 99% when applied across Cochrane reviews. If it were used to screen out low probability RCTs, it might save between 1.75 and 3 million citations per annum from being manually screened.

3055

The Human Behaviour-Change Project: Collaborating with computer and information scientists to improve behavioural science

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Purpose: The Human Behaviour-Change Project (HBCP) is building an Artificial Intelligence system to scan the literature and extract key information and use this to build, update and interrogate a model of human behaviour change to determine: 'What works, compared to what, how well, for whom, in what settings, for what behaviours, how long and why?'
Background: Behaviour change is essential to improve population health, disease self-management and clinical practice. Manual systems for evidence review and synthesis cannot keep up with the growth in the evidence base nor account of all the relevant features of interventions. Method: We are: 1) developing an ontology of behaviour change interventions, populations, context, mechanisms of action and behaviours; 2) annotating published literature using the ontology to develop and train an automated system to extract key information from research reports; 3) developing and evaluating Machine Learning and automated Reasoning Systems to synthesise and interpret the evidence and make predictions; and, 4) developing and evaluating an online user interface to interrogate the knowledge base contained within the system.
Conclusions: The three main outputs will be: an ontology of behaviour-change interventions; an AI system capable of extracting and interpreting evidence from published literature and making predictions; and interfaces allowing users (human and machine) to access the knowledge base and answer specific questions about behaviour-change interventions.

3056

Developing service delivery guidelines on acute medical emergencies: Challenges and solutions

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Background: The NHS in England is challenged by an aging population and limited funding. Hospitals are nearly full and the flow of patients through the system is compromised by various factors. The National Institute for Health and Care Excellence (NICE) in the UK commissioned the National Guideline Centre (NGC) to develop a guideline on Acute Medical Emergencies. This was one of the first NICE guidelines purely focussed on service delivery. Clinical questions on acute care have been covered by many other previous NICE guidelines. It was also probably the largest guideline that NICE has commissioned, approximately three times the size of a standard NICE

guideline.
Objectives: The guideline aimed to produce evidence based recommendations on the delivery of care for patients with acute medical emergencies in England. There was an acknowledgement from the outset that it was important to look at the whole pathway of patient care from initial contact with healthcare through to discharge from hospital and beyond. The challenge was twofold: to produce a service guideline applicable to the UK context using global evidence and to produce a guideline much bigger than a standard guideline.
Methods: Standard NICE methodology was followed but several adaptations were needed to processes. A guideline committee was convened to work alongside the technical team at the NGC. Work was needed to determine which key issues were most important and what evidence should be included in terms of applicability to the UK context. We also needed to be mindful of policy developments in this fast moving political area.
Results: We found that we needed to work with our stakeholders and committee members in new ways and particularly make decisions about the applicability of evidence to the UK context. The guideline is due for publication in October 2017.
Conclusions: From this experience, the NGC have developed new ways of working efficiently to develop very large guidelines and methods for working on service delivery topics, particularly in relation to keeping the evidence applicable to the national political context. This presentation will summarise our key learning points.

3057
Social media strategy for disseminating systematic review evidence

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Background: Online and social media such as Twitter, Facebook, YouTube, and Wikipedia are prevalent in every day life. Many journals and organisations, including Cochrane, have established cohesive dissemination strategies through these platforms.
Objectives: To illustrate social media strategies adopted by Cochrane United States (US) and Cochrane Eyes and Vision US satellite (CEV@US); to discuss considerations and challenges in evaluating social media strategies for communication and dissemination.
Methods: Cochrane US and CEV@US employ numerous strategies to disseminate our work, including a Twitter account with 797 followers and a Facebook group with 357 members. We also cite Cochrane reviews in YouTube videos and Wikipedia articles. Three metrics can be used to measure social media impact: 1) exposure, i.e. the number of followers, viewers, and subscribers; 2) engagement, i.e. the number of links clicked, message retweeted, liked, or commented on; and, 3) influence, i.e. whether the engagement metrics above are positive, neutral, or negative in sentiment. For example, to examine engagement, we used data from the '2015 Cochrane Review Group Impact Factor and Usage'" report to identify all completed Cochrane reviews published in 2015. We matched publications by their DOIs to the number of tweets, full-text downloads, abstract-views, and Wikipedia and news articles citing the review.
Results: We identified 943 Cochrane reviews published in 2015 with data available for the number of full-text downloads and tweets. We observed moderate correlation between the number of tweets and downloads (rho = .46) and abstract-views (rho = .42) (Table). However, because we do not know the temporality of tweets, downloads and other explanatory factors, we cannot make causal inferences. We will report analyses of other online and social media platforms.
Conclusions: Preliminary data indicate that Twitter may be associated with access to published Cochrane reviews. We wish to explore the important issues of using online and social media with the attendees.

Attachments: Table.png

3058

Development of a transparent proposal process for guidelines focused on uncertainties in clinical care

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Background: A systematic and transparent topic selection and prioritisation process, with specific criteria is a key step in guideline development (1). Guidelines should address areas of clinical uncertainty shown by variation in practice or outcomes. Change should be possible and desirable there should be potential to improve patient outcomes. There must also be evidence of effective practice. The existing SIGN topic proposal process allows for a broad scope Typical guidelines follow the patient pathway; diagnosis, treatment and follow up, and may contain many recommendations that reflect current practice.
Objectives: To develop a topic proposal process that: • addresses uncertainties; • is transparent; and, • results in a guideline that leads to significant improvement in care.
Methods: A published topic-proposal template was adapted and developed by a multidisciplinary group. The process was piloted with a proposal on managing migraine. The pilot proposal was updated and posted on the SIGN website at every stage of the process. Feedback was sought on the process.
Results: A topic proposal template from WHO was adapted to local needs by adding screening tools, declaration of interests and search narrative (2). Proposers are asked to define three key questions in areas of clinical uncertainty. The projected time for guideline development is 15 months.
Conclusions: SIGN guidelines now focus on the important but challenging questions where uncertainty exists or the evidence requires careful evaluation. This means the guidelines have fewer key clinical questions but they are also likely to produce the greatest effect on practice. 1) Schunemann HJ, Wiercioch W, Etxeandia I, Falavigna M, Santesso N, Mustafa R, et al. Guidelines 2.0: systematic development of a comprehensive checklist for a successful guideline enterprise. CMAJ. 2014;186(3):E123-42. Epub 2013/12/18. 2) Organization WH. Estonian Handbook for Guidelines Development. Estonia: World Health Organization; 2011.

3059

Guidelines for rare diseases: Why are they so difficult to develop?

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Background: A public policy publication in 2014 represented a first approach of the Brazilian Ministry of Health with the development of clinical guidelines for rare diseases. The process involved the engagement of several stakeholders and aimed at prioritising the main groups of anomalies for the beginning of the elaboration process. The lack of specific and validated methodology for the development of guidelines for rare diseases, as well as a lack of scientific evidence of high methodological quality are known barriers. However, in the process, other barriers were identified, even more impeding.
Objectives: To point out the barriers identified during the process of developing guidelines for rare diseases in Brazil.
Methods: Descriptive case study
Results: Rare diseases imply in not only fewer patients, but also fewer specialists in the topic and available therapies. Experts in diagnosis and care do not always have knowledge in health-technology assessment or evidence-based medicine. Another barrier relates to the exemption from conflict of interests of those involved, especially with the pharmaceutical industry. These factors imply difficulties, and even the impossibility of identifying specialists to compose the elaboration group. In addition, there is great resistance with the proposed method and the lack of commercial interest of pharmaceutical companies in producing or requesting authorisation from the regulatory agency to market important therapies, which represents an insurmountable

barrier to guarantee access to the existing therapeutic options.
Conclusions: After two years of implementation of the Public Policy for Rare Diseases in Brazil, the prioritised guidelines are still under development. In this way, the identification of these barriers becomes an important process in the development of a specific methodology for developing guidelines for rare diseases and overcoming these challenges.

3060

Exploration of barriers, facilitators and users' experiences of the GRADE-DECIDE Interactive Evidence to Decision framework (iEtD)

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Background: The GRADE-DECIDE Evidence to Decision (EtD) framework supports going from evidence to clinical recommendations, coverage decisions and health system or public-health decisions. The framework has been used in several WHO guideline development processes, among others. An interactive Evidence to Decision (iEtD) tool (http://ietd.epistemonikos.org) enables the framework to be tailored for use by different organisations to generate reports and interactive resources for specific target audiences (patients and the public, health professionals, policy makers and managers). These EtD frameworks are now integrated in GRADEpro-GDT and MAGICapp in addition to the stand-alone interactive version. However, little is known about how organisations are currently experiencing and using the iEtD frameworks, or about the barriers and facilitators related to its utilisation in real guideline development.
Objectives: To evaluate users' experiences of the stand-alone iEtD tool and identify the main barriers and facilitators for its utilisation.
Methods: The sample will consist of researchers who have registered and consequently used the iEtD. Initially, we will collect feedback through a survey and/or conduct semi-structured interviews. In a second phase we will evaluate the use of the iEtD in real guidelines.
Results: The results of this study are expected by August 2017.
Conclusions: The study will provide insight about how the EtD framework and the iEtD tool are being currently used, and what are the main barriers and facilitators for its use. This work will enable us to improve the iEtD tool and facilitate both its use and that of the EtD frameworks in general.

3061

Using Evidence to nurture multi-actor dialogue in the public sector: Lessons from the Paliament of Uganda

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Background: Parliamentarians through their oversight function have the power to debate and shape national policy, adopt and formulate laws and earmark resources for implementation of such legislation and government programmes.
Objectives:A major concern has been on how parliamentarians can get up-to-date, timely and reliable information on different issues that affect the country to enable evidence-based legislation.
Methods: The Parliament of Uganda has put in place a number of initiatives to facilitate multi-actor dialogue that has increased citizen engagement. These are: a memorandum of understanding between parliament and CSOs, daily access to the order paper, participation in national functions like the budget reading and state of the nation

address, first point of contact during Parliamentary outreach programmes, access to adopted reports of Parliament, attendance of plenary and committee meetings, involvement in bill and policy analysis, capacity building of members and committees of Parliament, submission of petitions to Parliament on issues of concern, budget prioritisation, submission of position papers to Parliament committees, participation in Parliament week and social media engagements.
Results:A number of actors are involved in evaluations and hence critical suppliers of evidence. Civil Society Organisations (CSOs) in Uganda typically collect vital information on different sectors on a daily basis. The academia and professional bodies in Uganda have played a big role in using to support advocacy for better policies, budgets and call for accountability in service delivery.
Conclusions:A multi-actor dialogue is key in building the capacity of citizens to play informed roles and expand their political engagement and space. These initiatives are strong avenues for ensuring evidence use in parliament. This paper shares the experience of the Parliament of Uganda in using evidence to nurture multi-actor (CSOs, academia and professional bodies) dialogue in the public sector hence promoting shared decision making.

3062
Construction of a clinical pathway development working group

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Background: At present, clinical pathway (CPs) has become one of the most important healthcare reform measures in many countries. The toolkits for developing CPs are very important to implement the CPs.
Objectives: In the current study, the authors aim to focus on the construction of a clinical pathway development working group.
Methods: A comprehensive literature search in the Cochrane Library, PubMed, EMBASE, Chinese Biomedical Database (CBM), China National Knowledge Infrastructure (CNKI), and the Wanfang Database was conducted from inception to February 2017. The number and proportion of reported items for each items were also calculated.
Results: A total of 14 toolkits for developing CPs were included. Among the toolkits, all of them described the scope of the team and doctors and nurses accounted for the majority of people; 42.9% (6/14) described the functional areas of each group; all of them described the development of a clinical pathway development team, 50% (7/14) had one group and only 7.14% (1/14) had 5 groups.
Conclusions: Although numerous toolkits for developing CPs were produced, more formal clinical pathways toolkits are needed.

Attachments: Construction of clinical pathway development working group.pdf

3063
The methodological quality of clinical pathways published in journals in China: 2014-2016

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Background: Critical pathways (CPs) are now used throughout the world. Despite their prevalence, many issues relating to clinical pathways in China remain unsettled. Therefore, it is necessary to evaluate the application of CPs quality.
Objectives: In the current study, the authors aim to focus on the methodological quality of clinical pathways between 2014 to 2016 in China.
Methods: We searched the Chinese Biomedical Database (CBM), China National Knowledge Infrastructure (CNKI), and the Wanfang Database from inception to February, 2017 to include the Clinical pathways in China. We evaluated methodological quality of clinical pathways with Integrated Care Pathway Appraisal Tool (ICPAT). The ICPAT including 25 items as a quality assurance tool which provides senior trust staff with a framework for developing CPs.
Results: There are 84 CPs published in journals were included. 83.3% (7/84) CPs didn't consider clinical risk as part of the content of the CPs, 3.57% (3/84) CPs test the ICP and audit the CPs documentation after the pilot; 94% (79/84) ICPs indicate the circumstances when a patient should come off or should not be put on (exclusion criteria) and 92.9% (78/84) CPs record the rationale for including and excluding pieces of evidence/guidelines. However, none of them conduct a literature search to gather the evidence base for the CPs and consider training of staff as part of the content; 3.52% (3/84) conducted a literature search and 30% (7/27) pilot test after the pilot.
Conclusions: Our study demonstrated that the methodological quality of clinical pathways in China was low, more efforts should be done to improve the methodological quality of clinical pathways in China.

Attachments: The methodological quality of clinical pathways published in journals in China 2014-2016.pdf

3064

The reporting quality of clinical guidelines in China based on Reporting Items for Practice Guidelines in Healthcare (RIGHT)

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Background: Clinical guidelines are an important tool for improving service quality. However, the benefits of guidelines depend on their reporting quality.
Objectives: To assess the reporting quality of clinical guidelines in China using the RIGHT instrument.
Methods: We searched the electronic databases of Chinese Biomedical Literature Database, China National Knowledge Infrastructure, The VIP Database and Wan Fang Database published from January, 2015 to December, 2015 to include the clinical guidelines. The RIGHT instrument was used by two independent assessors to conduct a systematic appraisal in 22 items. To assess the degree of compliance, every item was rated as 'Yes' for total compliance, 'Unclear' for partial compliance or 'No' for non-compliance, respectively. The number and proportion of reported items for each items were also calculated.
Results: A total of 74 guidelines were included. Of the 74 guidelines, 24 (32.4%) guidelines described the approach used to assess the certainty of the body of evidence, 41 (55.4%) guidelines described the year of publication of the

guideline, 46 (62.2%) guidelines reported the processes and approaches used by the guideline development group to make decisions 6 (7.8%) reported considering patients' values, 12 (16.2%) guidelines reported the funding source but none reported the role of the funders, 8 (10.8%) guidelines reported the draft guideline underwent independent review and 2 (2.7%)was external review.
Conclusions: Although numerous guidelines were developed in China in 2015, the reporting quality was generally low. Focusing on improving the quality of Chinese guidelines, rather than continuing to produce them in great quantity, is urgently needed.

Attachments: The reporting quality of clinical guidelines in China based on Reporting Items for Practice Guidelines in Healthcare (RIGHT).pdf

3065
Research networks, are they worth the effort? Experiences of establishing and running an evidence-synthesis network in northwest England

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Background: Before systematic reviews became integral to research and practice, researchers often worked alone on single projects in academic institutions. With increasing numbers of staff involved in evidence synthesis, we believed there would be sufficient benefit and interest in developing a network of northwest researchers involved in evidence synthesis enabling collaboration and sharing of information and resources.
Objectives: To establish and evaluate a research network for evidence synthesis in northwest England.
Methods: A launch meeting of the Manchester 'Evidence Synthesis Network' (ESN) was held on 1 April 2011. National experts were chosen as keynote speakers to draw attention to the network and attract members. A steering committee was established and, based on feedback from delegates, a series of regular workshops were held in subsequent years. A member survey was undertaken to assess impact of the network on individuals, teams and institutions.
Results: After 6 years, the ESN has almost 200 members from across the northwest and beyond and has run 19 workshops on a range of subjects including GRADE, literature searching, qualitative evidence, mixed methods, diagnostic accuracy tests, realist synthesis, health economics, text mining and public/patient involvement. 57% of survey respondents claimed that workshops met their expectations and 52% indicated that the content was relevant to their work. Members felt they benefited from general education and updating as well as the opportunity to meet other researchers and talk about shared interests.
Conclusions: The ESN has continually attracted a broad range of new and experienced researchers, in evidence synthesis from different settings/organisations. Feedback from members has been positive and both personal and institutional benefits have resulted. Reasons for success of the network include use of existing infrastructure for networks/logistics, a keen and engaged Steering Committee, and membership from a range of different research backgrounds and seniority. Based on our example, other groups are setting up similar networks.

3066
Using evaluations as learning and programme-improvement tools – Lessons from Uganda

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Background: Traditionally, evaluations were commissioned mainly to focus on the Development Assistance Committee (DAC) /Organisation of Economic Cooperation and Development (OECD) evaluation criteria of

relevance, effectiveness, efficiency, impact and sustainability. With increased focus on continuous learning, adaptation and improvement, organisations are increasingly incorporating a strong learning element within evaluations.
Objectives: To foster use of evaluations as programme-improvement tools
Methods: At Provide and Equip (P&E) consultancy firm based in Uganda, the evaluations that served as programme-improvement tools were characterised by the following: stand-lone learning research questions; review the theory of change and suggesting improvements where necessary; the data-collection methodology and tools having elaborate learning questions; approaching communities as learners and listeners as opposed to experts; documentation of life-changing stories and interventions behind the stories; establishment of both intended and unintended results and reasons why; and, the evaluation report with a dedicated section on learning.
Results: Some evaluations served as practical leaning tools rather than an end in themselves more than others in terms of fostering shared learning and programme improvement.
Conclusions: In order for evaluations to serve as change agents for learning and performance improvement, the learning element has to be clearly embedded in the design, methodology, presentation of findings and recommendations. Recommendation: Evaluation designs, methodology, tools and report outlines should be subjected to criteria to assesses whether they meet the learning agenda before they are implemented. This would be ideal at the inception-report phase.

3067

A comparison of different approaches for editing health-related information: An editor's satisfaction perspective

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Background: The need to provide health information in Plain English (PE) for non-native speakers and for individuals with low literacy levels has been widely acknowledged (1, 2) . Use of PE has also been shown to facilitate translation. Numerous institutions (e.g. the Centers for Disease Control and Prevention or Cochrane) currently provide guidelines on how to develop health content in PE. In addition, authoring support tools (such as Acrolinx) are being increasingly used to simplify health information (3, 4) , particularly as a result of the difficulties that contributors may encounter in remembering long lists of PE guidelines while editing (5, 6).
Objectives: This study investigates differences in the level of satisfaction experienced by editors when editing health content using both an automated and a non-automated approach. To the best of our knowledge, no prior work has compared these scenarios in terms of editors' satisfaction.
Methods: Editors will be asked to simplify selected content of Cochrane's Systematic Reviews using two scenarios: (i) by manually implementing Cochrane's guidelines for plain language summaries (e.g. The Cochrane Collaboration 2013), i.e. through a non-automated approach; and (ii) by applying Acrolinx author support rules (7), i.e. by means of an automated approach. Satisfaction will be measured via post-session questionnaires (8).
Results: Preliminary results based on data collected during a secondment at Cochrane UK in Oxford will be presented.
Conclusions: We expect that findings referring to editors' satisfaction will be particularly important in the case of editing environments that rely on volunteers (e.g. Cochrane or Simple English Wikipedia). Developing an editing scenario that maximises volunteer editors' satisfaction might increase the number of contributors and, in turn, the amount of health information which is made available in PE. References 1) Gilliver 2015. 2) Parker and Kreps 2005. 3) Azzam et al. 2016. 4) Ojala 2013. 5) Temnikova 2012. 6) Aikawa et al. 2007. 7) Bredenkamp et al. 2000. 8) Brooke 1996.

3068

Sharing resources to develop a guideline with little direct cost: the Bahrain Evidence-based Guideline INitiative (B.E.G-I-N) experience

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Background: Bahrain Ministry of Health (MOH) published a 'Periodic screening for breast cancer in women' guideline 2010. Budgetary and time constraints necessitated outsourcing for creation of a comprehensive breast cancer management guideline. Strengthening of public and local non-governmental organisation (NGO) partnerships in health systems & service delivery has been emphasized in recent World Health Organization Reports
Objectives: To update and enhance the scope of the existing guidance, and ensure timely delivery of a high-quality (GRADE & AGREE compliant) breast cancer guideline for the MOH by engaging and sharing resources with local NGOs (Think Pink Bahrain, Bahrain Breast Cancer Society) and international publishers of evidence-based clinical references (EBSCO, Duodecim).
Methods: Guideline development, based on RAPADAPTE (accelerated ADAPTE), was sanctioned by the Bahrain Supreme Council of Health & National Health Regulatory Authority. A Guideline Development Group (GDG) was part funded by the NGO, and the Steering Committee and multidisciplinary expert panel members were sourced from the MOH. Foundational guidelines, previously identified as high-quality were selected and updated using current best-evidence clinical resources (DynaMed Plus, EBM Guidelines) and additional MEDLINE searches. AGREE II will be used to ensure the quality of the guideline.
Results: Recommendations from 2 foundational guidelines (Costa Rican, Catalan) were refined and expanded to 120+ clinical scenarios (PICO-specific recommendations) and evaluated for consistency with SIGN and NCCN guidelines. DynaMed Plus and EBM Guidelines were used for identification of new evidence. Guideline completion is projected for August following external peer review
Conclusions: Increased efficiency with reduced costs was achieved using a core team with methodological expertise in guideline development and previous experience with rapid adaptation. Freeing up the MOH clinical experts from the more intensive aspects of development whilst ensuring the core team was compensated for their contribution highlights a possible framework for a partnership of government with nonprofit NGOs.

3069
Develop accelerated guidelines, based on a selective literature search

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Background: For a variety of reasons, policy makers and clinicians need rapid access to evidence-based decision support. The French National Authority for Health has developed accelerated guidelines (AG) according to a specific method, which is close to that specified in the G-I-N AG manual.
Objectives: To evaluate what evidence to search for and include in AG.
Methods: An experience-based feedback with three AG was performed.
Results: A context of urgency and a restricted number of questions are the common features of the three AG developed. Search strategies were executed in an iterative manner, starting with high-level evidence and, when this was not available, by progressively identifying lower level evidence on a case-by-case basis. Different limitations were identified regarding the literature search. These were: insufficient guidelines available (indications of electrophoresis, serum proteins); outdated guidelines/systematic reviews (pain management in

children); or specific topics which require extensive discussion (musculoskeletal disorders and burnout). These examples required a second search to refine search strategies and move to a lower level of evidence.
Conclusions: Our experience-based feedback concerning the development of 3 AG showed that high-level evidence is not always available and the process often requires a supplementary search on a case-by-case basis. The AG method includes stakeholder consultation phase which appears to be essential, especially when high-level evidence is not available. Implications for guideline developers/user: The development of accelerated guidelines can be improved by better adjusted search literature.

3070
Deciding when a guideline will stand the test of time – the use of a static list

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Background: Methods and processes are in place to ensure that guidelines remain current and up-to-date. In one national guideline development programme the process involves undertaking surveillance reviews of public health guidelines every 2 years, through checking intelligence on the current relevance of the guideline and identifying newly published research evidence. Increasingly, as resources for guideline development become more scarce, decisions about when to undertake a surveillance review are needed that go beyond consideration of time since publication alone. One of these considerations concerns determining the conditions under which a guideline's recommendations are expected to remain current and are unlikely to change in the foreseeable future; that is, placing it on a 'static list'. Guidelines on the static list are reviewed every 5 years for the need to update.
Objectives: This poster will present details of the process and decision tool developed to determine when a guideline should be placed on a static list at NICE. Examples of public health guidelines placed on the static list and rationale for decisions will be provided. Discussion points: Considerations for placing a guideline on the static list include: -Has a previous surveillance review yielded a 'no update' decision? -Have topic experts or a search of national research funders' databases identified any major on-going research due to be published within the next 5 years which may have an impact on the recommendations, i.e. addressing a 'gap in the evidence' or an area that could have feasibly been included in the guideline but was originally deemed out of scope, such as a new technology? -Is this a fast moving topic area, are new developments expected? This should include assessment of the changing socio-political climate. -Are a guideline's recommendations intervention-based or focused on implementation/practice principles, with the latter expected to 'stand the test of time'? Circumstances under which a guideline may be taken off the static list will also be discussed.

3071
The updating of clinical practice guidelines in China

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Background: Updating a Clinical Practice Guideline (CPG) can ensure its validity and practcality, whereas the status quo among CPGs, in most of the cases, does meet the expectation.
Objectives: To investigate the updating status, methods and procedures for CPGs in China published between 2013-2015.
Methods: We searched WanFang Data, VIP, China National Knowledge Infrastructure (CNKI) using the term 'guideline' in the title, and Chinese Biomedical Literature Database (CBM) using 'guideline' as the topic word from January 2013 to December 2015. Then we screened and analysed all included papers by two independent researchers.
Results: A total of 204 Chinese CPGs were included. Sixty-nine (34%) CPGs have been updated, among which the average update period was 5.3 (range 1~11) years. Seventeen (8%) guidelines had been updated more than once. Tweenty-nine (14%) CPGs indicated that guidelines will be updated, and 23 (12%) simply reported the methods: 19 (82%) will update according to new evidence, two (9%) will depend on the new evidence and feedbacks, and two (9%) will base on new evidence and clinical experience. Only one guideline indicated that it was updated every two to four years, whereas others did not mention when to update.
Conclusions: The update rate of Chinese CPGs was low, and the update period was comparatively long with great difference among different guidelines. For updating plans, only few reported their methods.

3072
Who is responsible for developing patient guidelines?

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Background: Patient versions of guidelines are easier for laypeople to understand and accept when compared with the professional ones, and have becomes increasingly important for healthcare services as well as shared decision making.
Objectives: To examine who participated in developing the patient version of guidelines.
Methods: We searched PubMed and Google with 'patient guide', 'patient version of guideline' and 'patient guideline' for relevant documents, and identified organisations that released patient guidelines. Then we browsed the official wedsites of them to retrieve patient guidelines. All the included guidelines were read by two independent researchers to abstract the information about the development group/individuals.
Results: We identified 244 patient guidelines. Most of them were released by professional organisations, among which the top five were TES/ THF (59, 24%), RCOG (47,19%), ACP (39, 16%), NCCN (38, 16%), BCMA (25, 10%), and ESMO (20, 13%). We found patient guidelines from the same organisation tended to employ the similar group: TES/THF reported two editors; RCOG's patient guideline was developed by Patient Information Committee; ACP reported a group consist of one health writer, producer, project manager and cover and guidebook designer; NCCN had one director and two medical writers; ESMO reported the guideline was written by a medical doctor, reviewed by two clinical experts, including the lead author of the professional version, and reviewed by patients' representatives; SIGN declared a group composed of healthcare professionals, NHS staff, patients, carers and members of the public; whereas others, including BCMA, AGA and ACS, gave no relevant information.
Conclusions: Who should be involved in developing patient guideline was not clearly stated in most of the guidelines. According to experience of these organisations, we suggest developers should consider both medical experts and patients' representatives to ensure the reliability and acceptability, and include writers to achieve the

readability.

3073

A database of systematic reviews in eyes and vision – a cross-section of the evidence available to underpin clinical practice guidelines and set the research agenda

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Background: As the number of systematic reviews (SRs) published in the health literature grows, we need to alert users about reliability of the evidence presented. Mapping treatment recommendations to existing reliable SRs ensures clinical practice guidelines (CPGs) are evidence-based and highlight where more research is needed. Objective: To describe our experience in creating a database of SRs in eyes and vision.
Methods: We searched PubMed, EMBASE, and the Cochrane Library for eligible SRs in eyes and vision. We used no language or date restrictions. We used a two-stage screening process to identify eligible records. We defined SRs as investigations addressing a focused research question and employing scientific methods to identify, select, assess and summarise individual studies to answer the research question. For each SR, we extracted or classified the publication information (e.g. journal, year), eye condition (e.g. glaucoma, cataract), and research question category (e.g. diagnostic, intervention). For intervention SRs, we assessed reliability based on five criteria: the presence or use of 1) eligibility criteria for including studies; 2) comprehensive searches for studies; 3) assessment of risk of bias of included studies; 4) appropriate methods for meta-analysis, when applicable; and, 5) conclusions supported by results of the review. Reliable SRs identified are used to underpin the American Academy of Ophthalmology's (AAO) CPGs.
Results: Our database includes 1846 full reports of SRs in eyes and vision as of 15 March 2016 (Table). Most reports were published from 2011 to 2015 (59.4%). Cochrane contributed more SRs (18.3%) than any other single source (494 unique sources). The five most common eye conditions addressed were glaucoma, age-related macular degeneration, cataract, diabetic eye disease, and refractive error. In 2016, the AAO updated two CPGs. We identified 50 reliable SRs from a total of 106 intervention SRs of cataract and 11 reliable SRs from a total of 40 intervention SRs of refractive error to support the AAO's CPGs on these topics.
Conclusions: Our database of SRs serves as a source of evidence in eyes and vision.

Attachments: Table_Lindsley 2017.pdf

3074

Balancing risks, harms and benefits in guideline development for pain management

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Background: Guidelines for treatment of acute and chronic non-cancer pain (CNCP) should be developed considering the balance of risks, harms and benefits to promote safe and effective use. The evidence of effectiveness of opioids for pain and function is of low quality. Their adverse effects are often under-appreciated or ignored. Opioids are now the leading cause of injury deaths in the US and Canada. Other adverse effects are

common; effectiveness for other than severe acute pain is variable and quite limited.
Objectives: To summarise the methods for consideration of risks, harms and benefits in guideline development. To present the balanced approach used in the development of the revised ACOEM opioid guideline. To support clinician, patient, employer and payer decision making, considering risks v benefits
Methods: We used the ACOEM methodology to search, critically assess and synthesise the literature about the positive and negative effects of chronic opioid use for acute, subacute and chronic pain.
Results: A summary of generally low-quality evidence revealed very small improvements in subjective pain. Evidence of effectiveness had multiple methodological issues. On the other hand, opioids affect most organ systems, with common effects on the GI system and less frequent but significant risks of road crashes, respiratory and cognitive problems, overdose and death among patients and members of the public using others' opioids. These effects are related to dose, age, gender, comorbidity, and concurrent use of multiple opioids and sedative/hypnotic and psychiatric medication. Review of observational studies is an important part of guideline recommendation development when trial evidence is not available.
Conclusions: Clinicians, patients, employers, payers and medical organisations should consider the balance of positive and negative effects of drugs such as opioids on personal and public safety, quality of life, total costs, and mortality and morbidity. Given the minimal evidence of benefit of opioid use for chronic pain, informing stakeholders about effects and risks is critical to objective informed decision making.

3075

Effectiveness of audiovisual formats as strategies for knowledge translation in health: A systematic review of literature

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Background: Knowledge translation (KT) refers to methods for the implementation of knowledge beyond disseminating data. It intends to reduce the gap between the way that information is generated and its application to real-world scenarios in benefit of patients. Audiovisual materials have gained importance in KT in health and different formats have been proposed for this purpose.
Objectives: To assess the effectiveness of audiovisual materials as interventions for KT in health.
Methods: Systematic review of scientific literature. Randomised clinical trials and observational studies comparing the effectiveness of audiovisual formats for KT in general population were considered. Learning, recalling and health outcomes were retrieved. Database search included Medline, Embase, Cochrane Central Register of Controlled Trials, LILACS, PsycARTICLES and WHO International Clinical Trials Registry. Also, a search of grey literature was conducted. Screening of references and data extraction was performed by two independent reviewers. Also the risk of bias (Cochrane Collaboration tool,) and the overall quality of evidence (the Grading Recommendations Assessment, Development and Evaluation Working Group- GRADE) were assessed.
Results: 17 studies were included. Two randomised trials compared 3D with 2D videos in oral health, 3 narrative formats in cancer and surgery, and 12 techniques in the design of educational multimedia material based on learning and psychological theories (animated agent, animation and narration, accent/voice, animation and text, music/sounds, redundant features, personification). Important heterogeneity was detected; it was related to diversity in populations, interventions and criteria for evaluating outcomes. Selection, performance and detection bias were identified as potential threats to validity (Figure 1). Quality of the evidence was rated as low.
Conclusions: Redundant elements should be avoided, although when presented, action-oriented keywords improve retention. Narrative presented in human voice with standard accent and using personalisation increases recall and comprehension, also 3D format showed better recall than 2D.

Attachments: Figure 1.jpg

3076

Evidence-based design of 12 knowledge clips in maternal and neonatal health

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Background: Improving maternal health, diminishing maternal mortality and preventing avoidable neonatal deaths are international priorities. Educational interventions (EI) are innovative methods to impact health indicators by encouraging patient involvement. However, its design should follow some considerations. Strategies to improve its design include needs assessment, interactivity, adaptation of the EI to the public and the use of the best evidence on content design.
Objectives: To design 12 evidence-based knowledge clips (KC) regarding topics of maternal and neonatal health.
Methods: Design of the KC considered 3 steps: critical analysis of recommendations available in clinical practice guidelines (CPG) and checklists, the preliminary design of contents and, their validation by an expert panel. Four CPG were analysed using the instrument AGREE II, one issued by the Ministry of Health and Social Protection of Colombia and three published by the World Health Organization (WHO). The validated Colombian version of the WHO Safe Childbirth Checklist was also reviewed. Topic and content proposed based on the findings. Afterwards, 10 clinical experts (patient education and safety, obstetrics, gynaecology, psychology, pediatrics and neonatology) participated in the consensus applying the modified Delphi method.
Results: Scores above 50% on all the domains of AGREE II indicated good quality of the CPG. The proposal on content and topic presented to experts reached consensus after 2 rounds of discussion and voting. The main recommendations oriented towards encouraging an environment of trust during the clinical consultation, promoting the preconception visit, precisions of clinical aspects and its presentation in a patient-friendly manner, details of warning signs according to gestational trimester, promotion of breastfeeding and importance of diagnostic tests.
Conclusions: Accurate and rich content for the KP was created after an iterative process that involved evidence of high-quality and formal expert opinion. The final KC included key recommendations and information for antenatal care, vaginal and caesarean section birth and postpartum (Figure 1).

Attachments: Figura 1.png

3077

Landmark change in Australian cervical screening practice: Clinical guidelines to make a great public-health programme even better

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Background: Australia has one of the world's lowest cervical cancer death rates, due to a Pap-test based

screening programme introduced in 1991. Through the research of Australian immunologist Prof. Ian Frazer, Australia led in the development of a vaccine for human papillomavirus, the cause of most cervical cancers. Following the vaccine's introduction, and HPV protection for a new generation of women, the Australian Government commissioned a systematic review to scope a major change in screening practice. The review concluded that a shift from two-yearly Pap testing of women aged 18-69 to five-yearly HPV testing of women aged 25-74 would reduce cervical cancer incidence in Australia by 25-36%. Following the Government's agreement to renew the programme, the Department of Health commissioned Cancer Council Australia to develop guidelines to support associated clinical practice.
Objectives: To ensure that Australia has a comprehensive, accessible, evidence-based clinical guideline, endorsed by key stakeholders, to support an unprecedented change in organised cervical screening.
Methods: An expert Working Party was formed to develop the guidelines. Given the rigour applied to the systematic review that recommended the change in screening age and test, the Working Party engaged research leaders who guided the programme's renewal, with a shift in focus to practice points and clinical pathways across the screening and healthcare spectrum. Literature reviews (systematic and general) and modelling of natural disease history were applied to the clinical questions. This focused on a range of scenarios, given the fundamental change in screening practice. Results & Conclusion: After a lengthy development process and consultation, the National Cervical Screening Program: Guidelines for the management of screen-detected abnormalities, screening in specific populations and investigation of abnormal vaginal bleeding were launched in March 2017. They guide the most significant organised change in cancer management at a national level in Australia's history and will be disseminated over the next 6-8 months to prepare clinicians for the new programme in December.

3078

The application of traditional Chinese medicine (TCM) and acupuncture in assisted reproductive technology (ART): Evidence mapping

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Background: Assisted reproductive technologies (ART), including intrauterine insemination and in vitro fertilisation and embryo transfer (IVF-ET), have been widely applied in the treatment of infertility; however, the general success rate is hovering around 30% even for IVF-ET due to various situations, such as poor ovarian response, recurrent implantation failure, etc. Traditional Chinese Medicine (TCM) and acupuncture may play an active role as supplementary medicine in these difficult situations and improving the success rate of ART.
Objectives: We aim to investigate and evaluate current evidence of applying TCM and acupuncture in the area of ART.
Methods: We searched the Chinese National Knowledge Infrastructure (CNKI) with the following keywords: traditional Chinese medicine, acupuncture, reproductive medicine, assisted reproductive technology, intrauterine insemination, IVF-ET, and tubal baby.
Results: Our literature search yielded 104 results, among which, 60 were included in the full-text screening stage. Those excluded were generally literature discussing the application of TCM/acupuncture in the primary treatment of infertility, e.g. ovulation dysfunction, tubal occlusion. Of the 60 full-text articles (ranging from 2002 to 2016), 47 were journal articles and the other 13 were master's or doctoral dissertations. No systematic review and meta-analysis is available. Most of the journal articles were reviews and case reports. 24 were original clinical researches, while only 8 and 6 were prospective, randomised clinical trials (RCT) investigating the effectiveness and safety of TCM and acupuncture, respectively. In terms of the quality of the RCTs, randomisation was performed with a variety of quality, most of the studies not able to undertake the masking/blinding, and the sample size was generally limited.
Conclusions: TCM and acupuncture have been widely applied in ART, particularly for difficult cases with failed ART experience. We will further investigate their effectiveness and safety in ART, evaluate the quality of the evidence and report the results in the near future, in order to guide the clinical application of such treatment.

3079

Assessment of Russian clinical practice guidelines with the AGREE II instrument

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Background: Clinical practice guidelines (CPGs) became increasingly important in the Russian health environment as support tools for clinical decision making and interaction with health insurers. Over the last decades, a series of countrywide, guideline-like documents were developed and used mainly in health financing. However, not all health professionals are clear what guidelines are for, how they should be developed and used. Promotion of health technologies by manufacturers is a widespread and accepted reality, while the process/methodology of guideline development and assessment seem to be not fully established.
Objectives: To assess methodological quality of Russian produced officially recognised CPGs with AGREE II instrument with the aim of furthering appreciation by the Russian academic community of the values of evidence-based unbiased approach to CPG development.
Methods: We searched Russian websites for all available CPGs in two distinctly different clinical fields: management of pancreatic/biliary pathologies and management of acute ischaemic stroke up to January 2017. At least four independent clinical experts applied AGREE II instrument to assess each identified CPG. Experts assessed quality across 6 domains (scope and purpose, stakeholder involvement, rigour of development, clarity of presentation, applicability, and editorial independence), with a total of 23 items.Each item was scored on a 7-point scale (1 - strongly disagree, to 7 - strongly agree). We expressed all scores as AGREE II calculated percentages (100% - for all items scored 7 by all experts).
Results: CPGs obtained higher scores in domains Clarity and Presentation (35 to 100%), Scope and Purpose (13 to 100%), Stakeholder Involvement (9 to 67%); and lower scores in Applicability (0 to 19%), Rigor of Development (0 to 76%). Editorial Independence was consistently scored 0%. The highest overall methodological quality was noted for 'Surgical treatment of patients with chronic pancreatitis' Russian Society of Surgeons (RSS).
Conclusions: Methodological quality of CPGs was generally low, except for some domains of selected CPGs. Editorial Independence was scored 0% for all studied CPGs.

3080

Guideline use behaviours and needs of primary-care practitioners in China: A cross-sectional survey

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Background: Clinical guidelines are known as an effective way to improve health performance. However, little is known about general practitioners' attitudes to and behaviours concerning clinical guidelines in China.
Objectives: The aim of this study is to investigate use behaviours and needs of clinical guideline in primary care of China.
Methods: We conducted a cross-sectional survey among 268 institutions in 15 provinces of China from December 2015 to May 2016. The questionnaire was developed by literature review and experts consultation method. On-site

survey was performed by paper questionnaires to minimise response missing. Multivariate logistic regression was used to identify factors associated with the knowledge of and attitude towards clinical guidelines.
Results: Among respondents, 91.7%(1568/1708) knew clinical guidelines but only 11.3%(177/1568) frequently use them. The main access to guidelines for primary-care practitioners was public search engines (63.4%;911/1438) instead of biomedical database and the major barriers for primary-care practitioners to use guidelines included lack of training (49.9%;778/1560), access (44.6%;696/1560) and awareness (38.0%;592/1560). Only less than ¼ of respondents considered current guidelines were 'entirely appropriate' for primary-care setting (23.5%;339/1442). Most participants (96.2%;1509/1568) admitted the necessity of developing clinical guidelines for primary care. The attitude towards current guideline was associated with institutions' location, level, and professional title (P<0.05).
Conclusions: Our survey reveals poor knowledge and use of clinical guidelines in primary care as well as the gap between the needs and current status of clinical guidelines for primary care in China. In addition, lack of access to and training in the development of guidelines also prevent primary healthcare practitioners from using guidelines in their daily practice.

3081

Establishing the prevalence of low back pain in Africa: Methodological issues in putting it all together

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Background: Low back pain (LBP) is the most prevalent musculoskeletal condition found among both developed and developing nations. An update of a 2007 systematic review was required. However several challenges exist in synthesising and analysing epidemiological information from Africa.
Objectives: To conduct an updated search of the literature into the prevalence of low back pain (LBP) among African nations and highlight the specific challenges faced in retrieving epidemiological information in Africa and on conducting meta-analyses of LBP data.
Methods: A comprehensive search of all accessible bibliographic databases via the Stellenbosch University's Medical and Health Sciences Library website was conducted. All population-based studies into the prevalence of LBP among children, adolescents and adults living in Africa were included. Methodological appraisal of included studies was conducted using the adapted tool for LBP prevalence studies. A meta-analysis of the data, as well as meta-regression and sensitivity analyses were conducted.
Results: Lifetime, 1-year and point prevalence of LBP among African populations was found to be higher than recently reported estimates for global LBP prevalence. The review process, however, highlighted a number of challenges related to conducting, sourcing and pooling relevant epidemiological data in Africa. One of the first methodological challenges, was the uncertainty of whether all relevant data was included in the review. Another challenge in conducting this review is the fact that Africa is riddled by huge economic inequality between countries. The poor methodological quality of included studies posed another challenge in conducting this review. Although measures were taken to ensure that the heterogeneity among studies was considered during meta-analyses, the summary estimates provided in this review should still be viewed with caution.
Conclusions: Finding ways in which to address these challenges experienced when conducting research in Africa is warranted. Future African LBP and epidemiological researchers should conduct methodologically robust studies and report their findings in accessible resources.

3082

Evaluation of network meta-analysis in clinical practice guidelines for percutaneous coronary intervention: A systematic review

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Background: Clinical practice guidelines (CPGs) have an important role in guiding choices among the numerous options in percutaneous coronary interventions (PCIs). Meta-analysis provides much valuable clinical evidence for Clinical practice guideline. but little is known about the influence of network meta-analysis (NMA).
Objectives: To assess whether NMA in clinical practice guidelines for PCI are consistent with current evidence and whether the consistency of the guidelines depends on the quality of guideline development.
Methods: Web of Science, MEDLINE, Embase, and Cochrane Library were searched from inception to August 2016, Two reviewers independently screened citations to identify English-language guidelines on PCI. Reviewers assessed whether the guidelines addressed and agreed with conclusions from these network meta-analysis. Two reviewers independently rated NMA quality by using AMSTAR.
Results: Of the 803 screened citations, 29 NMA met the inclusion criteria. Most of NMAs (86.2%) published from America and Europe. Twelve NMAs (41.4%) were cited by CPGs. Two NMAs included observations study and the rest all the randomised-controlled trials(RCTs). All-cause mortality, myocardial infarction, target vessel revascularisation and stent thrombosis are the main outcome with high attention. NMAs with higher quality are much more likely to be cited by CPGs and which were high consistent with the evidence-based conclusions.
Conclusions: Not all clinical practice guidelines on PCI were consistent with available evidence from NMA. Guidelines judged to be of higher quality contained more recommendations consistent with evidence-based conclusions. The quality of guideline development processes varied substantially.

3083

A review of the quality of tuberculosis costing studies

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Background: Variable quality of unit-cost data may lead to poor decision making due to biased results. Quality can relate to robustness, precision and reliability of the data, as well as standard reporting of cost methods and results. If quality of reporting is high, comparability across cost estimates and settings is enhanced. Conversely if reporting quality is low it is difficult to use cost estimates appropriately. In order to improve the nature and use of cost data in priority setting and decision making, understanding the quality of cost data and reporting can help to inform which methods need strengthening and what areas of reporting should be standardised. Findings from a review of cost methods and reporting will be used to guide the development of the reference case and improved methods for tuberculosis (TB) and HIV costing.
Methods: Eight electronic databases were systematically searched using key words relating to cost, TB and treatment. Next, we developed a comprehensive extraction tool, which allowed us to describe the methods used, appraise the quality and reporting standards of existing literature and extract tuberculosis costs. Inclusion and exclusion criteria were applied to establish those studies that contained primary cost data. Data was extracted on study scope, sampling, methods, inclusion of costs, valuation and analysis. Results and discussion: We identified 21 293 records through our systematic search strategy. Of these, 775 papers met the inclusion criteria, with 252 articles containing empirically collected provider costs relating to TB. While the purpose of the costing studies was well defined, there was heterogeneity in the methods used to estimate costs, especially with respect to the reported discount rate and methods to measure and allocate costs.
Conclusions: A review of TB-costing studies indicates that transparency in methods is limited due to lack of standard reporting of methods and results, and in cases where methods are reported well, a variation in approaches for measuring costs. A reference case on costing may help encourage researchers to be explicit and transparent in how they estimate costs.

3084

Brazilian guideline for diagnosis and treatment of Chagas disease

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Background: Chagas disease is an infectious disease caused by the protozoan parasite Trypanossoma cruzi. It is estimated that 8 million people are chronically infected worldwide, especially in Latin America. However, its prevalence has increased outside endemic areas, such as USA and Europe, due to migration. Thirty to forty per cent of chronically infected patients develop Chagas cardiomyopathy or gastrointestinal disease, with clinical manifestations including heart failure and megaesophagus.
Objectives: To present the recommendations of the Brazilian guideline for diagnosis and treatment of Chagas disease.
Methods: The guideline development process followed the Guidelines International Network (G-I-N) and Institute of Medicine (IOM) standards and the G-I-N – McMaster Guideline Development Checklist. The guideline aimed to provide recommendations for diagnosis and treatment of Chagas disease, as requested by the Brazilian Ministry of Health. No high-quality guideline was available for adaptation or adoption. The scoping meeting was held in August 2016, with 15 panel members, including infection disease specialists, cardiologists, gastroenterologists, primary care physicians, biochemical, policy makers, health economists and patient representatives. No financial conflict of interest was reported by panel members. Seventeen clinical questions were defined for both acute and chronic phases, including special populations, such as pregnant women and immunosuppressed patients. An independent group of methodologists is responsible for evidence search and synthesis, including decision tree models for diagnostic tests.
Results: Evidence synthesis is currently in progress and the second guideline panel meeting will occur on March 2017. Results will be available for the Summit.
Conclusions: No high-quality evidence-based guideline for Chagas disease is available. This will be the first guideline for Chagas disease using the G-I-N and IOM standards. Although it has been developed for the Brazilian context, this guideline may be adopted by or adapted to other countries.

3085

Disclosure and management of conflicts of interests in clinical practice guidelines

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Background: There is no common agreement on conflicts of interests (COI) definition, disclosure and management. As a result, the understanding of COI and how it should be declared and managed differs among authors, reviewers and editorial boards. In addition, although most of the organisations involved in guideline development have policies for COI disclosure to ensure transparency, it is not clear how these policies are integrated in the process of making recommendations to ensure guideline trustworthiness. Objective: To develop a tool for COI disclosure and management in clinical practice guidelines.
Methods: We conducted a systematic literature review panel with experts from different areas, and online Delphi rounds. Among experts, we included guideline developers, bioethicists, lawyers, clinicians and representatives from the Brazilian Health Surveillance Agency and the Brazilian Ministry of Health.
Results: We defined COI as "divergences between interests and obligations of an individual so that an observer may question whether his/her actions or decisions are motivated by explicit, latent, or potential benefits or influenced by his/her convictions or beliefs, thus precluding an unbiased performance of his/her functions". We provided definitions for financial and non-financial COI, as well for direct and indirect conflicts. We developed a COI disclosure form with 11 items, including questions related to financial, intellectual and ideological COI. In addition, strategies for active search of COI were proposed. In the framework, COI are assessed for each guideline question and classified in four levels (high, moderate, low, and no impact), according to the probability of resulting in biased judgment by the participant. We suggested, in the framework, avoiding a guideline chair with high or moderate COI for any questions and to limit the involvement of methodologists and panel members to questions in which they do not have high or moderate COI.
Conclusions: We developed a comprehensive framework for disclosure and management of COI in guidelines. So far this framework has been used in a scoping meeting for the development of one guideline.

3086
Implementing a school vision screening programme using smartphone technology in southern Botswana

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Background: The Ministry of Health (MoH) in Botswana has developed the National Plan for Eye Care 2015-2019 to improve eye health. Peek Botswana, MoH, Ministry of Education and Botswana Optometrists Association implemented smartphone-based Peek Vision School Screening in one subdistrict to provide evidence for the development of a national school screening programme. Objective :To evaluate the challenges and opportunities of implementing a school vision screening programme utilising Peek Vision smartphone technology to inform planning and implementation of a national school vision screening programme. Method: 49 schools in the Goodhope Sub-district of Botswana underwent school vision screening using smartphone vision screening, SMS notification and tracking level of take up of services: refraction, spectacles, referral. Triage (including refraction where indicated) was delivered in two comparative arms: directly after screening (26 schools), and at a hub school (23 schools). Selected teachers and nurses were trained to use the system.
Results: 12 876 children were screened (6-22 years). 16% screened positive. There was a 96% triage attendance rate (95.2% attendance for same day triage, 97.4% for 'hub' site triage. Relative to total cohort: 1985 refractions (15.4%), 796 spectacles (6.2%), 94 treated with medications (0.7%), 63 referred for investigation (0.5% of screenings). True positive rate of screening 43%. Where elite screeners were identified and used the true positive

rate rose to 64%. Conclusion: The true positive screening rate, although acceptable (>40%), varied greatly between schools but paired screeners had better true positive rates which can be incorporated into future programmes. Cost savings and efficiencies of running triage in hub schools did not result in a lower attendance. Combining the learnings from this pilot will increase the effectiveness of school vision screening programmes in Botswana resulting in efficiencies, cost savings and contribute to planning for a national scale up.

3087

Using evidence to improve lives: A rapid systematic approach

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Background: The importance of relating clinical practice more closely to evidence is recognised by health and social care professionals and policy makers alike. However a significant obstacle is the lack of time to locate and read the literature relevant to clinician's areas of practice. In addition, the expectation to assess its quality and deal with conflicting information can be challenging. Therefore, we have developed the Palliative Care Evidence Review Service (PaCERS) to support professionals and other decision makers working in palliative care.
Objectives: To describe the development of PaCERS methodology, used to conduct rapid evidence reviews on questions of current and direct importance to clinical care or service delivery, producing critically appraised summaries of best available evidence, in the shortest possible timeframe.
Methods: Our methodology was developed using streamlined systematic review methods to identify and appraise high quality evidence. We have involved stakeholders to refine our methodology and reporting process, and to achieve consensus on how best PaCERS can serve the palliative care community and engage policy makers in the uptake of evidence for health policy.
Results: Findings will be presented highlighting methodology development, and the rapid reviews conducted thus far, with an emphasis on demonstrating clinical engagement and impact on professionals and other decision makers working in palliative care.
Conclusions: The service is unique in responding to external clinical/organisational calls for evidence rather than itself defining the review agenda. It will impact directly on palliative care clinicians and other decision makers, and indirectly on patients/carers, by allowing integration of research evidence into service development and practice at pace, and further embed research as part of daily practice. This approach could be utilised in other healthcare disciplines to produce high quality evidence-based information in shortened timeframes.

3088

Plain language summaries as tools for raising awareness of Cochrane evidence and social media as dissemination channels in Poland

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Background: Cochrane Poland is putting an effort to promote and disseminate Cochrane evidence among both practitioners and healthcare consumers.
Objectives: To present our experience with using plain-language summary (PLS) as a tool for raising awareness of Cochrane evidence and using social media as dissemination channels.
Methods: In March 2016 we launched Cochrane Poland fanpage and in November 2016 Twitter profile. PLS are translated by 18 translators, many of them medical students. We have also established partnership with the University of Warsaw's educational project 'Humanities for Health', engaging 24 translators of the Institute for

English Studies, University of Warsaw, in translations of Cochrane PLS into Polish as a part of their translation training.
Results: The number of PLS available in Polish is constantly growing. In order to disseminate those PLS a Facebook fanpage was launched and 136 posts have been published, some of them reached over 3000 recipients. The popularity of the fanpage is constantly growing. A Twitter profile was established to disseminate to a broader audience, so far 52 tweets have been published, some of them were received by more than 2000 individuals. We are diversifying disseminated forms by recording podcasts and preparing graphic forms of PLS (blogshots). Dissemination is based on organic and partnership reach. Our posts get to young adults between 25-34 years old and 65% of our fans are women. On average our posts reach about 500 individuals; the most hot topics are statins, vaccines and alternative medicine, while on Twitter the most often displayed tweets are about supplementation. Moreover evidence from Cochrane reviews is used in educating students from the Dietetics Faculty and raising their awareness of availability of such evidence. We plan to use PLS during Science Festival outreach activities to educate health care consumers/public representatives about Cochrane evidence.
Conclusions: Launching profiles at different social media environments helps to reach different groups of people. PLS can also be used as tools for raising awareness of Cochrane evidence in every day life.

3089
An evidence-based novelty model for the incorporation of evidence in pharmaceutical policy

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Background: The formulation of pharmaceutical national policies has increased the role of evidence over the years. However, a standardised mechanism for use of evidence in pharmaceutical policy that can be used as a guide for policy makers, does not exist
Objectives: To present an evidence-based novelty model for the incorporation of evidence in the formulation of pharmaceutical policy.
Methods: A realist review was developed in order to identify the domains and subdomains of the process of formulation of pharmaceutical policy. A series of iterative searches and posterior analysis were developed in order to generate a model about the utilisation, the contextual factors and main points of use into the process of developing the policy. A conceptual map was created in order to present the relationship among the domains and subdomains. A framework was developed and validated with pharmaceutical policy makers, evidence providers, decision makers and stakeholders.
Results: The model identified 6 domains: evidence generation, evidence translation, evidence use, formulation of the pharmaceutical policy, publication of pharmaceutical policy and evaluation. Each domain has several subdomains which specify the interrelations and dynamics of each domain. 40 subdomains were identified in total. The model focuses on the main points of the process of pharmaceutical policy that need evidence, the requirements of its generation, synthesis and translation in order to present the evidence in a usable way for policy makers with high methodological rigour. The model also presents the decision process that uses evidence and how this can be more consistent and transparent. Other relevant aspect of the model is the interrelation among stakeholders, policy makers, evidence providers and pressure groups and their relationship with evidence use and the development of the pharmaceutical policy. Barriers and facilitators of evidence uptake were identified.
Conclusions: The model can guide policy makers and stakeholders in the process of evidence-based pharmaceutical policy formulation and to understand the role of evidence in decision making.

3090
Developing the evidence-base Clinical Practice Guideline of Retinopathy of prematurity for Latin-American: An effort of PAHO, Cochrane STI and GIN Iberoamerican.

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Background: Retinopathy of the prematurity (ROP) is a serious disease which occurs in premature newborns. ROP is one of the main causes of preventable blindness in children and can affect up to 34% of premature children.
Objectives: To present the collaborative process of developing and evidence-based clinical practice guideline (CPG) for management of ROP for Latin-American.
Methods: A CPG was developed using the WHO developing manual with the support of Cochrane STI and the Iberoamerican Branch of GIN. The multidisciplinary GDG selected two CPGs for the adaptation process. The search was updated and new evidence synthesis and GRADE evidence profiles were created. The strength of the recommendations were graded during the II Symposium of The Prematurity Day with specialists of Latin-America.
Results: The CPG was elaborated with the following objectives: 1) To identify risk factors for occurrence of ROP in neonatal units; and, 2) to present the management strategies for screening, treatment and follow-up of newborns with ROP. Thirty recommendations were formulated which apply to all healthcare professionals who work in neonatal units. The GDG found challenging to formulate recommendations regarding ROP screening in premature newborns given the variability of health systems of Latin-America, the low access to a retinologist or pediatric ophthalmologist and the opportunity to referral to specialist on the recommended times. In areas, where access is low to specialists, telemedicine can be an alternative for ROP screening. Overall, the evidence of the guideline is low quality and the recommendations were formulated in order to maximise implementation and improve outcomes of children with ROP.
Conclusions: The development of a regional guideline faces several challenges. However, the collaborative efforts of networks, organisations and countries allows the production of a high-quality guideline with a high feasibility of implementation in different settings.

3091
Infection prevention in general practice, the challenge of developing a guideline

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Background: Worldwide, there is an urgent need for reducing dissemination of infections associated with healthcare. This includes the prevention of infections in general practice, where the prevalence of MRSA and other multiresistant bacteria is increasing.
Objectives: The Dutch College of General Practitioners aimed to update the 2004 guideline on infection prevention in general practice and bring it in line with other (hospital) guidelines on this subject in 2015.
Methods: We composed a multidisciplinary guideline development group consisting of general practitioners, microbiologists and an expert on infection prevention in the hospital. We carried out literature searches on the most important questions. We made evidence-based recommendations or, in case there was no evidence, recommendations based on consensus within the guideline group. However, general practitioners and microbiologists in clinical practice had major critical as well as contradictary comments on our concept, which resulted in a controversy. In order to achieve consensus among all stakeholders, we organised an invitational conference, including the Dutch Health Care Inspectorate.
Results: At the invitational conference, barriers for general practitioners were discussed, such as the feasibility of the recommendations in general practice, the lack of evidence for most recommendations, little sense of urgency for following the guideline and the fear of being judged by the Health Care Inspectorate. The invitational

conference led to consensus on a set of minimum requirements for infection prevention in general practice, which can be used as standard for monitoring by the Health Care Inspectorate.
Conclusions: Developing a guideline on infection prevention for general practice is a challenge due to lack of evidence and differing opinions. Recommendations for hospital care need to be adapted to ensure acceptability and feasibility of the guideline in primary care. A set of minimum requirements can help to set a standard for quality improvement.

3092
Cost and performance accounting as a base for modeling update options. Data from the German Guideline Program in Oncology

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Background: In 2008, the German Guideline program in Oncology (GGPO) was launched under the auspices of the German Cancer Society, the German Cancer Aid and the Association of the Scientific Medical Societies. Since 2008 Guideline development was supported by a total of 8,5 Billion Euro. In order to plan further financing for keeping 30 GGPO guideline topics updated, the expenditures of the first eight years were analysed.
Objectives: The aim of this analysis is to investigate guidelines development performance parameters of guideline development in order to calculate average costs for such parameters (eg. evidence search and assessment for a key question and , average travel and consensus meetings costs per GDG member). This will be the base for framing costs for guidelines to be updated in the future.
Methods: 25 guideline projects were analysed. Costs were documented for labour expenses, orders to external HTA agencies if needed, travel costs, and consensus meetings. Range and mean were calculated. Number of key questions and evidence based recommendations were extracted. Costs for engaging an external HTA agency are compared to other models.
Results: :Generally, the costs for the evidence work differ strongly: The mean of cost for one key question was 6.625 € ranging from 1.157 € to 16.987 €. Costs of HTA agencies were generally above this mean.
Conclusions: Based on the calculation of the data of the GGPO during the last eight years an estimation of costs for a guideline update is possible. However, variations have to be taken into account. Given a fixed annual budget the to keep the oncological guidelines updated the number of key questions has to be limited. Alternatively, certain guideline topics are excluded from updating. Comparing the data to experiences of guidelines in other countries would be helpful to discuss the topic guideline development costs within the GIN community.

3093
Guideline on multimorbidity of the German College of General Practitioners and Family Physicians (DEGAM)

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Objective: To develop a clinical practice guideline on multimorbidity based on two methodological approaches: 1) systematic review of the literature clinically relevant to patients with multimorbidity; and, 2) development of an overarching algorithm (meta-algorithm) for primary care encounters of patients with multimorbidity.
Methods: 1) Clinical recommendations on multimorbidity were obtained from evidence reports and formal consensus. 2) Development of Meta-algorithm consisting of the following steps: - Design of a generic meta-algorithm to structure and prioritise GP encounters of patients with multimorbidity based on 10 heterogeneous case vignettes. For each vignette specific management recommendations (N-of-one-guidelines) were developed, based on systematic guideline synopses and comments by practicing GPs. Using pattern recognition common decision nodes and care elements were identified from all N-of-one-guideline and combined into an overarching

and generic meta-algorithm. - Eliciting healthcare preferences of patients with multimorbidity from systematic literature analyses, complemented by qualitative interviews. - Formal consensus of the meta-algorithm by the multidisciplinary guideline panel.
Results: 1) Key recommendations focus on the need of sufficient time for intensive doctor-patient-relationship and shared decision making, the encouragement of patients to present their personal preferences, the comparison of priorities of patients and doctors, medication review and consulting other professional groups. 2I) Our meta-algorithm for very complex patients illustrates a superordinate process which permanently keeps in view the entire patient and reflects the logic of a GP encounter with explicit decision situations, communication needs and priorities. Conclusion: Due to the complexity and heterogeneity of health problems in patients with multimorbidity guideline recommendations are best presented on a high abstraction level. Still, practitioners need concrete advice for action. We think the DEGAM guideline with the overarching meta-algorithm fulfills the two tasks. The guideline is currently being piloted in a German GP setting.

3094
Social media as a knowledge-translation tool to disseminate public-health evidence

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Background: Health Evidence supports the public health workforce search for, interpret, and apply research evidence to practice. The healthevidence.org repository offers 5000+ quality-appraised systematic reviews evaluating the effectiveness of public-health interventions. Since 2009 Health Evidence has used social media as a knowledge translation (KT) tool to disseminate evidence and engage in online conversations regarding 'what works' in public health.
Objectives: Share techniques, strategies, and resources used by Health Evidence to create interactive content, engage on social platforms, track analytics and measure impact.
Methods: Short, actionable messages from methodologically strong systematic reviews are formulaically created and posted daily via the @HealthEvidence Twitter and Facebook accounts in text and image form. Infographics are used to share statistical, graphical, and written descriptions of findings, and to promote a monthly webinar series. Analytics capturing data regarding engagement with social media posts and web behaviour on heathevidence.org is logged and aggregated monthly.
Results: The @HealthEvidence Twitter account disseminates findings from an average 28 moderate/strong reviews monthly to 6500+ global followers from 119+ counties. Google Analytics reveal social media posts increase web behaviour access to a review on the day-of Tweeting by 1,186%, compared to average daily views the month prior, with Twitter users spending nearly 5:20 mins viewing the page. Twitter Analytics reveal that a single review-based Tweet will be viewed by 1100+ followers, and can engage up to 12 unique followers. Use of infographics to promote upcoming webinars and disseminate evidence increases Twitter impressions and engagements by 57% and 355%, respectively, compared to text-only posts. The social media team commits an average 30 mins daily for actively monitoring platforms in real time and 1-2 hours weekly each for of content creation and scheduling, and analytics.
Conclusions: Findings reinforce integration of social media platforms as part of a comprehensive KT strategy to support local, national, and global public-health decision making.

3095
An evaluation of emergency guidelines issued by WHO in response to the 2015-16 Zika virus outbreak

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Background: In 2015 several countries reported a potentially novel association between Zika virus infection during pregnancy and birth complications. The World Health Organization (WHO) issued emergency guidelines in response to this public health emergency of international concern.
Objectives: To describe and assess the quality of guidelines issued by WHO in response to the 2015-16 Zika virus outbreak.
Methods: We included all guidelines issued by WHO in response to the 2015-16 Zika virus outbreak. We extracted data on their characteristics, evaluated the development, publication and updating processes, and assessed quality using AGREE-II.
Results: 21 guidelines were identified (Table 1). All met WHO publication requirements, including a logo, reference number, disclaimer, issue date and contact information. 81% included an expiration date. 8 updates were issued and in one case the outdated version was still publically available. Translations into languages other than English occurred for 66%, but only 3 of the 8 updates were translated, resulting in translations being available for only 7 of the 13 (56%) most current version of the guidelines. Although external experts were involved in 86% of guidelines, they were not always listed or declarations of interest collected. The funder was listed in only 19%. Only 6/21 referenced a systematic or rapid evidence review: all of which were updates. 25% used a structured approach to formulate recommendations; 29% were peer reviewed; and 33% were reviewed by the WHO Guidelines Review Committee (GRC) Secretariat. AGREE-II scores varied and were lowest for rigor of development, applicability, and editorial independence.
Conclusions: All guidelines met WHO publication standards. A significant number were translated into languages other than English, however, updated versions are not consistently translated. There is room for improvement in the use of research evidence, presentation of declarations of interest, and input from the GRC Secretariat. These data inform future efforts to improve the reporting and trustworthiness of WHO guidelines in the context of a public-health emergencies.

Attachments: WHO_Zika_Guidelines_Assessment_Table1.pdf

3096
Cochrane workshop: Product marketing and management

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With the arrival of the 21st century and all the connectivity within, we are participating in a historic moment for our society, with the advent of the Internet and means of transport becoming safer and faster, we can be anywhere in the world, connecting to all information available worldwide. For the better dissemination of all information current available, it is necessary to organise the way this information arrives to the costumers, emphasising quality and reliability. Innovation will always be the word to gain competitive advantage. The Cochrane Collaboration has broken boundaries and requires a different approach to defend its position in the scientific community. Rentability, is the expected return of an investment discounting costs, rates and inflation. Considering that the workshops are one of the cornerstones to any financial Cochrane Centre why not an attempt for improvement while marketing this product of paramount importance? Unification of certification, for example, would be a differential which would add value, and why not? The Internet has joined centres around the world. A simple link could integrate Cochrane centres around the world for closer relationship to exchange materials, ideas and subjects and why not the creation of a workshop in common? Is the workshop, which takes place in France, the same that occurs in Brazil? Has this knowledge the same academic support? Is the United Kingdom workshop presented every year? Or would it be every 2 months? These questions are just a few of many others which end up floating over the heads of all members of the Cochrane centres. Purpose is an invitation to knowledge of the

structure of the workshop as well as new proposals in respect to the current workshop model, leading to a structural unification, dissemination and design. All workshops worldwide may have the same weight, academic support and dissemination to all those who seek this product. References Allen C, Richmond K. DOI:10.1111/j.1756-5391.2011.01109.x. Gerry B Hill. DOI:10.1016/S0895-4356(00)00253-5.

3097

Cost-effectiveness of empirical prescribing of antimicrobials in community-acquired pneumonia in Colombia

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Background: In Colombia, no data are available on the estimation of the cost and effectiveness of treatment for community-acquired pneumonia (CAP) managed in an ambulatory setting. Different studies have reported that the main cost of CAP is related to hospitalisations.
Objectives: To assess the cost-effectiveness of azithromycin, clarithromycin, amoxicillin-clavulanic acid, erythromycin and amoxicillin as empirical outpatient treatment options for community-acquired pneumonia without risks factors in adult patients under 65 years old in Colombia.
Methods: We designed a decision-tree cost-effectiveness model, from a third-party payer perspective (only direct medical costs, for the Colombian healthcare system) and a one-month time horizon. Total costs were estimated using official standard national sources of 2015 as well as hospital bills. Base cases were validated by an expert panel, results were converted to USD using the exchange official rate for 2015 (1 USD = 2743.39 COP, Colombian pesos). Effectiveness was defined as clinical cure, and was analysed with multivariate metanalysis based on a comprehensive literature review. Incremental cost-effectiveness ratios (ICER) were calculated, and deterministic and probabilistic sensitivity analyses were performed.
Results: Costs (and effectiveness rate) for each for each of the alternatives were, per patient treated: azithromycin $87.21, clarithromycin $203.32, amoxicillin-clavulanic acid $259.22, erythromycin $475.5, and amoxicillin $2325.06. Azithromycin dominates over the other treatments evaluated (Cost-effectiveness ratio USD $ 87,21). Results did not change significantly under the sensitivity analyses conducted.
Conclusions: Azithromycin was dominant, it can reduce the hospitalisation ratio and health system costs in Colombia. It may be the choice for outpatient treatment in subjects under 65 years-old without risk factors.

3098

The development of evidence-based resources for cancer care

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Background: A central focus of the Joanna Briggs Institute (JBI) is the development, dissemination, and implementation of evidence-based, point-of-care resources for clinicians via the JBI Cancer Care Node.
Objectives: To establish a suite of evidence-based, point-of-care resources for clinicians to support the provision of best clinical practice and improved patient outcomes.
Methods: An international reference group of clinical experts, consumer representatives, and policy makers provide guidance regarding an agreed taxonomy of key areas for cancer care resource development and offer feedback, topic suggestions, and content for the node. Individual resources, including evidence summaries, recommended procedures, audit criteria, and information for health consumers are developed based upon systematic approaches. Systematic reviews and systematic review protocols developed based on JBI methodologies are also available via the node. Clinicians are trained and supported to use JBI resources in

evidence implementation projects around the world.
Results: Covering a range of topics from screening to management of acute toxicity to survivorship care, as of 2017, there are 324 evidence summaries, 186 recommended practices, 38 consumer information sheets, 13 audits, 6 best-practice information sheets, 78 systematic review protocols, and 38 systematic reviews available online. Each resource is sent to over 30 international experts for feedback. Audits based on JBI tools have also led to improved clinical practice and patient outcomes.
Conclusions: This poster outlines the details and processes surrounding the development of the JBI Cancer Care Node and its contents into a resource to assist in the translation and implementation of evidence into practice for cancer care professionals.

3099

Developing clinical practice guidelines for low-to-middle income countries: Methods, experiences and lesson learnt in adapting, adopting or contextualising existing CPGs

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Background: Methods around developing de novo (new) clinical practice guidelines (CPGs) are well established with numerous guides, tools, resources and examples. With the growing number of existing CPGs, and taking account of resource implications for de novo development, resource-limited settings need alternative methods to de novo CPG development. Using existing high-quality CPGs to make recommendations relevant to local contexts through adopting, adapting or contextualising are such alternatives. However, limited examples exist showcasing the pragmatic application of this approach in settings where time and budget constraints are a real issue.
Objectives: To develop contextually appropriate evidence-informed CPGs for pre-hospital emergency care providers in South Africa using alternative guideline development methods. About the project: Following engagement with an expert panel to identify key questions, we searched for and appraised existing CPGs. A process of adapting, adopting or contextualising existing CPGs was used, but not without its challenges, to develop the South African guideline. Our experience and learning points: The final guideline included more than 270 CPGs culminating in over 1000 recommendations for pre-hospital care. Challenges experienced included the lack of guidelines applicable to the African setting, issues in evidence synthesis including poor-quality guidelines and heterogeneous level of evidence classifications. Essential learning points included focusing of key CPGs, clear knowledge translation strategies and stakeholder engagement while key successes included easy and specific searching strategies, logical evidence mapping leading to easier content management and using an accessible online platform to incorporate expert panel and advisory board feedback.
Conclusions: Re-inventing the wheel to produce CPGs is not always an option. Alternative methods exist that are systematic, transparent, rigorous and most importantly within reach of resource-limited guideline development teams.

3100

Low-cost, high-quality guidelines through global partnership working

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Background: The development and maintenance of high-quality clinical guidelines requires substantial resources. Working in partnership with international colleagues we have developed a low-cost process for adapting or contextualising existing high-quality guidelines for other healthcare settings. Guideline contextualisation enables rapid development of high-quality guidelines in response to emerging healthcare priorities. Antimicrobial resistance is an increasing concern globally, with governments committing substantial resource to the development of strategies to slow the development and spread of antimicrobial resistance.
Objectives: To describe both the process for contextualising clinical guidelines developed by the National Institute for Health and Care Excellence (NICE) for the New Zealand health care context and its application to a suite of guidelines addressing disease-specific (respiratory tract infections and sepsis) and system-wide approaches to antimicrobial stewardship.
Methods:A process for contextualising clinical guidelines based on the ADAPTE framework was used to contextualise three NICE guidelines - Respiratory tract infections-the prescribing of antibiotics in primary care (CG69); Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use (NG15) and Sepsis: recognition, diagnosis and early management (NG51).
Results: Awareness of antimicrobial resistance in the treatment and management of disease is important in ensuring the antimicrobial medicines are used when needed but that use is reduced without an increase in harm when use is not indicated. Important contextual differences between the UK and NZ health care settings in the treatment and management of these conditions were identified. How these differences have impacted on the contextualisation of guideline recommendations will be presented.
Conclusions: We have developed a methodologically robust process for the contextualisation of NICE clinical guidelines. Our experience in contextualising guidelines across a number of different areas will helpfully inform similar initiatives.

3101
Quality and feasibility of guideline adaptation by general practice trainees

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Background: Guideline development requires a good understanding of key principles of evidence-based medicine (EBM). It is unclear whether general practice (GP) trainees are capable of using formal guideline-adaptation processes.
Objectives: The aim of this study is to describe and evaluate the process used to support GP trainees on involving them in guideline adaptation as a method for teaching EBM.
Methods: The results of the guideline adaptations were inventoried in a specifically designed matrix. These matrices were assessed by eight different reviewers with experience in the use or evaluation of guideline adaptation methods. Each matrix was evaluated as being good (all the adaptation steps were correctly carried out), moderate (revision was necessary, but without important comments) or poor (important concerns regarding the adaptation process). All students were invited to complete a survey on the feasibility of the process and the provided support.
Results: We started our guideline adaptation project in 2012. Thus far, 122 students have engaged in adapting 60 different guidelines. So far 47 guidelines have been examined on quality by one of the reviewers. 3 (6%) works were considered of poor quality, 23 (49%) were considered of moderate quality and the remaining 21 (45%) were considered of high quality. Analysis of the surveys is still ongoing and will be reported on.
Conclusions: When supervised in a structured manner, students are capable of understanding and performing all

the steps of a formal guideline adaptation process. The programme has been very successful and the resulting adapted guidelines of good quality. Comments of the students on feasibility will be reported on.

3102

What's unique about conducting research with adolescents in low- and middle-income countries: Introducing a new methodological series

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Background: The world is witnessing the largest cohort of adolescents in history, yet significant gaps in knowledge about how to maximise the opportunities for this population remain. Some of these gaps are tied to methodological shortcoming on how to collect and analyse data on adolescents, particularly those who are disadvantaged or vulnerable.
Objectives: This methodological series consists of seven briefs intended to capture and summarise best-practice approaches to conducting research with adolescents living in low- and middle-income countries (LMICs). The target audience is health and development professionals, who conduct, commission or interpret research and/or evaluate research findings to make decisions about programming, policy and advocacy.
Methods: Building on recent work by the Lancet Commission on Adolescent Health and Wellbeing, the briefs are written by leading experts and cover a variety of topics, including indicators and data sources, research ethics, research with disadvantaged, vulnerable and marginalised populations, participatory research, measuring the enabling and protective systems for adolescent health, and economic strengthening interventions for improving adolescent well-being.
Results: The series provides an overview of the methodological quality of research in adolescent well-being, identifying areas where research methods are lacking and where the unique characteristics of adolescence have been incorporated into methodological approaches.
Conclusions: The methodological briefs are part of a broader effort to increase understanding of the social and structural determinants of adolescent well-being. Social and structural determinants are a key driver of well-being during the adolescent period and, by influencing vital social transitions from adolescence into adulthood, have enormous implications for an individual's health and well-being across the lifespan.

3103

Building awareness for evidence-based practice in Malaysia

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Background: Systematic review development has been a major focus in the research activities of the National Institute of Health (NIH), Malaysia for the last three years. In November 2014, a systematic review workshop was conducted for healthcare practitioners and researchers to promote the use of systematic reviews to inform healthcare decision making.
Objectives: Creating awareness among researchers in Ministry of Health Malaysia on developing quality systematic reviews for evidence-based practice and research.
Methods: We conducted a survey using self-administered questionnaire to the workshop participants to evaluate their understanding on the process of Cochrane Systematic Review as well as Review Completion Workshop and Scoping Review. There were two sections in the questionnaire: i) the participants' experience, scope of practice and research focus; and, ii) knowledge and awareness among participants regarding Cochrane systematic reviews

and scoping reviews.
Results: Forty two per cent of the participants had been working less than 5 years and 58.3% had been working more than 5 years. 25% of the participants had been working in the same department for more than 5 years. Nearly seventy per cent (69.4%) of the participants were medical officers, 16.7% technical and support staff and 13.9% specialists. Only 36.1% had attended Cochrane systematic review training prior to this course and 5.6% participants had been involved in a Cochrane systematic review. Among the participants, 66.7% have attended scoping review training before and 13.9% had been involved in a scoping review. Two-third of the participants understood the process of developing Cochrane systematic reviews and scoping reviews. Post-workshop, there were substantial increases in the number of participants who understood the process of developing a Cochrane review and scoping review (p=0.007) and the structure in reporting Cochrane and scoping reviews (p=0.001).
Conclusions: Even though there was an increment in awareness and understanding after the workshop, we believe a lot of effort and approaches need to made to promote evidence-based practice.

Attachments: Building awareness_edited.pdf

3104
Development of medical and tecnhological documents on standardisation of medical care in cardiovascular diseases in Ukraine

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Background: Cardiovascular diseases are the leading cause of death and disability in the population of most countries, including Ukraine.
Objectives: To develop up-to-date evidence-based clinical guidelines and protocols of medical care in cardiovascular diseases which will allow harmonisation of Ukrainian practice with international recommendations and quality medical care assistance for the relevant areas.
Methods: At the end of 2014 the multidisciplinary working groups on development of guidelines and protocols on different areas of cardiovascular diseases were approved. According to the results of a systematic literature review conducted in the databases Medline, PubMed, DynaMed, G-I-N etc. ESC, ACCF/AHA and NICE guidelines were selected for adaptation in Ukraine.
Results: During the meetings the working groups discussed the opportunities to meet the guidelines' recommendations in real conditions in Ukraine. There were debates concerning the possibility of implementation of certain recommendations in Ukraine.The group also considered the issue of new antiplatelet drugs with a high evidence base, which were not registered in Ukraine at this stage. The adapted guidelines for the treatment of acute and chronic coronary artery disease included separate sections with recommendations for revascularisation from 2014 ACCF/AHA guideline, which allows the doctor to stratify patient against the risk of complications and identify high-risk patients who should be given urgent percutaneous coronary intervention. As a result of the work clinical guidelines and unified clinical protocols were prepared, adapted and approved by the Ministry of Health of Ukraine on Acute Coronary Syndromes Without ST Segment Elevation, Stable Coronary Artery Disease, Pulmonary Hypertension, Prevention of Cardiovascular Disease, Dyslipidemia, Heart Failure, and Atrial Fibrillation.
Conclusions: Development of adapted clinical guidelines and unified clinical protocols on cardiovascular diseases is an issue of state concern in the field of public health. The availability of such new up-to-date medical documents is a breakthrough in medical care assistance for these areas.

3105
Cost-effectiveness of cardiac rehabilitation versus usual care in Chile

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Background: The secondary prevention plays a fundamental role in patients after a cardiovascular event. One of the most effective interventions is Cardiac Rehabilitation (CR), but in Chile, this service is given only to 5% of candidate patients, mainly in urban areas and in the private health system, apparently due to its higher costs in comparison with usual care.
Objectives: To assess the cost-effectiveness of CR compared with usual care in survivors from an Acute Coronary Syndrome (ACS) from the perspective of the public health system in Chile.
Methods: A Markov Model was developed with 5 health states: ACS survivor, Second ACS, Complications, General Mortality, and CV Mortality. The transition probabilities between health states for usual care and corresponding relative risk (RR) for CR where obtained from a Cochrane systematic review. Health benefits were expressed as utilities and measured trough the EQ-5D-3L survey. Costs for each health state were identified and quantified from the national cost verification study and in some cases from focus surveys. The CR cost was estimated by a micro-costing system. Time horizon was lifetime and discount rate for both costs and outcomes was 3% per year. Deterministic and probabilistic analysis was performed with TreeAge Pro ©. Structural uncertainty was managed by designing of 3 scenarios: CR as actually is delivered in a specific public health centre (San José Model); CR as is recommended by South-American Guidelines (South-American Model), and CR as is proposed for low-resource settings (Low-Resource Model).
Results: Cost-effectiveness results of CR versus usual care showed an incremental cost-effectiveness ratio (ICER) for San José Model of $ 152,73 USD, for South-American Model of $ 358,70 USD, and for Low Resource Model of $ 128,92 USD. The estimated cost of CR for one entire programme for one patient was from $ 58,14 USD in the Low-Resource Model to $ 490,12 USD in the South-American Model.
Conclusions: Considering a cost effectiveness threshold of 1 GDP per capita (about $ 20.000 USD) the CR is highly cost effective for the public health system in Chile.

3106

How to optimise the implementation of a computerised decision-support tool for knee osteoarthritis in Belgian general practice?

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Background: In Belgium, healthcare professionals have free access to an evidence-based database, called EBMPracticeNET, with more than a 1000 international guidelines validated for the Belgian healthcare professionals. This portal can also be used to generate computerised decision support (CDS) in the Electronic Health Records (EHR) of GPs. To date, the evidence on the effect of CDS on patient outcomes is very uncertain. Therefore, we develop a new CDS tool that involves diagnostic approach and management of knee osteoarthritis. Knee osteoarthritis was chosen as a topic, because it is one of the most common musculoskeletal diseases and its economic impact is similar to that of coronary heart disease.
Objectives: The objective of this study is to enhance the feasibility of a new CDS tool for knee osteoarthritis in general practice by performing an extensive pilot before implementing the tool.
Methods: We will conduct a multi-phased pilot prior to a multi-centre, cluster-randomised trial. In this trial GP practices will be randomly assigned to receive the CDS intervention or to follow the usual care in a 1:1 ratio. Before the start of the intervention we will: 1) conduct in-depth semi-structured mixed interviews with GPs and patients; 2) integrate the knee osteoarthritis algorithms in the portals for CDS; 3) pilot-test the CDS intervention for implementation readiness; 4) developing an e-learning intervention for GPs; 5) ask the participating GPs to perform a computerised search in their EHR to identify any existing knee osteoarthritis patients; and, 6) perform a nested study by interrupted time series to follow the number of patients having a codified knee osteoarthritis from three months prior to the trial.

Conclusions: GPs and patients perception on knee osteoarthritis and decision support could play an important role in improving the feasibility of this new CDS tool.

3107

Standards for Reporting of Overviews of Reviews and Umbrella Reviews (STROVI) statement

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Background: There are a growing number of overviews of reviews or umbrella reviews- articles aimed at summarising evidence from multiple systematic reviews on a similar topic. Current standards or reporting frameworks are ill-equipped in ensuring consistency of reporting of overviews of reviews including the sufficiently described quality of primary studies, the amount of overlap, internal validity and generalisability. Hence researchers need a unique set of guidelines in place when designing and reporting overviews of reviews. To the best of our knowledge no reporting guidelines exist which outline the key items to be considered when describing overviews of systematic reviews or umbrella reviews in healthcare.
Objectives: Our objective is to develop recommendations for reporting overviews of systematic reviews or umbrella reviews, based on the need to extend the 27-item PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) checklist.
Methods: While developing this research programme, we aim to adhere to the Guidance for Developers of Health Research Reporting Guidelines as outlined by Moher et al. 2010. The following stages are planned for the development process. First, we will conduct a systematic review of the literature to seek relevant evidence on the quality of reporting overviews of systematic reviews or umbrella reviews of healthcare. Secondly, a sample of 100 participants will be invited to take part in a Delphi exercise to reach a consensus on essential items to be included while reporting overviews of systematic reviews. Thirdly, the development, and piloting of the Standards for Reporting of Overviews of Systematic Reviews (STROVI) statement and publishing an explanatory document is predicted.
Results: We anticipate that the final result will be the creation of the STROVI statement and explanation and elaboration paper.
Conclusions: The developing of overview of reviews or umbrella reviews, have been impeded due to insufficient reporting and incompleteness. The standardised reporting of overviews of reviews is aimed at advancing the field; guiding future researchers; and publishers.

3108

International Guidelines: Adapt to local clinical practice or not?

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Background: International medical scientific organisations often develop generic clinical practice guidelines, which may also be used in The Netherlands. However, one-on-one adoption of an international guideline is not possible as such because the organisation of healthcare and the patient perspective from Dutch practice must be taken into account. Therefore, it is not always clear whether adaptation of the international guideline is more efficient and thus preferred.
Objectives: The goal of this project was to develop a practical tool to support the process of deciding whether adaptation of the international guideline is preferred over initiating a regular guideline development process from scratch.
Methods: Bases on experiences from two pilot projects, adaptation of guidelines on work-related asthma and

bladder cancer, a step-by-step plan for the adaptation of a guideline was developed. International initiatives such as the ADAPTE toolkit for guideline adaptation and the AGREE II tool (Appraisal of Guidelines for Research & Evaluation) were used.
Results: A practically applicable step-by-step plan was developed, including a checklist that helps to make an advance assessment of the need for adaptation. The checklist consists of three main domains; I. assessing the independence of the guideline, II. checking the (methodological) quality, and III. assessing the project scope, including the framework assessment.
Conclusions: Based on the experiences of both pilot projects, it was concluded that adaptation of an international guideline can potentially result in more efficiency. However, both pilot projects also made it clear that an assessment of the methodological quality of the international guideline prior to the project start is essential. Adding population and regional specific considerations to an international guideline is essential in making a guideline suitable for local practice. The developed checklist supports a well-considered decision when choosing between adaptation and starting a guideline project from scratch.

3109
Presidential hotline: A potential tool for evidence-based decision making in the health sector in South Africa

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Background: The Presidential Hotline (PH) is a powerful citizen-based tool to strengthen evidence-based decision making and generation of local knowledge with regard to front-line services. The tool is used to monitor that government responds efficiently and effectively to the complaints, enquires and suggestions made by citizens. The whole of government is connected to the IT system which has the function to drill down from national government to provincial and local government, administratively managed in line with intergovernmental relations protocol.
Objectives: The objective of the paper will be to demonstrate the PH as a tool generating evidence to improve management decisions made with regard to health-related information with the benefit of incorporating the experiences, expectations and values of citizens. This paper will describe efforts and institutional arrangements that are already fostering convergence between the PH and the heath sector, as well as opportunities available and challenges to overcome.
Methods: A content analysis will be done of heath data collected from April 2013 to January 2017. Emerging key trends will be discussed and disaggregated to provincial level. Evidence will be triangulated with Statistics South Africa Surveys and the findings of the Frontline Service Delivery Monitoring that is done by the Department of Planning, Monitoring & Evaluation. This will allow for contextualisation and verification of the evidence bringing together qualitative and quantitative methodologies.
Results: The results of the study show that the PH can support evidence-based decision making providing cheap as well as fast access to timely knowledge within a geographical area, to support the district health system in South Africa.
Conclusions: There is an opportunity to explore the socio-economic correlates of health as the PH collects complaints from citizens across all sectors. Further research needs to be undertaken to determine how the PH may contribute to laying the foundation for both political and administrative evidence-based accountability in an environment, where building the capacity of government officials is crucial.

3110
How evidence-based is online information for patients? Analysis of orthodontic websites for accuracy of content compared to systematic review findings

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Background: With quick and unfiltered access to omnipresent online information, it is very easy for patients to become either well-informed or misinformed. Orthodontics being at the cutting edge of dental specialties, is often marketed to patients using online media. The accuracy of the content and the extent to which the information on these websites is based on best-available evidence or systematic reviews remains unknown.
Objectives: To assess the degree of distortion of online websites providing information related to orthodontics.
Methods: We divided orthodontic-related information relevant for patients into 5 domains – 1) effects of malocclusion; 2) benefits of treatment; 3) advantages of advocated treatment method; 4) superiority over other methods; and, 5) avoiding undesirable outcomes. We gathered the current evidence-based information on these domains by conducting a search of Pubmed, CDSR and top 5 international orthodontic journals, for systematic reviews. We then searched google using the terms 'orthodontics' or 'braces' and scrutinised the information in the first 100 websites of the search results. Assessment of whether their content was in line with the systematic review findings which we had gathered, was recorded using a scale for degree of distortion.
Results: The Google search yielded more than 8 million hits. The 100 websites that were assessed consisted of a mix of orthodontic product manufacturers, orthodontic societies, orthodontic practices and blogs or informational websites on orthodontics. We found that the degree of distortion was least among information provided by official orthodontic society websites and the greatest deviation from evidence was found in orthodontic products' manufacturers websites. Treatment effects, speed of treatment and deleterious effects of malocclusion were the aspects which were most over-estimated. More details of the statistics and analysis will be revealed on the poster.
Conclusions:A high degree of deviation from evidence-based facts exists in online orthodontic websites, which needs to countered by dissemination of the accurate facts.

3111

Updating national guidelines with recommendations of duration of sickness absence and as a tool for assessing work ability

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Background: Certifying physicians express their need for evidence-based guidelines with recommendations of duration of sickness absence. Since 2007 the National Board of Health and Welfare (NBHW) in Sweden provides such a national guideline for approximately 120 health conditions. The Insurance Medicine Decision Support (FMB) includes recommendations of expected duration of sickness absence, information about condition, prognosis, impairment, activity limitation and rehabilitation. In 2016 the National Board of Health and Welfare had the government commissions to update conditions related to psychiatric diagnoses.
Objectives: The aim of this presentation is to describe the work with updating 17 psychiatric diagnoses and highlight why ICF is an important tool to assess work ability.
Methods: Experts in medicine were nominated by the Swedish Society of Medicine. The experts reviewed the original recommendations and gave suggestions of revisions. Programme Officers at the NBHW compiled the suggestions. A final version was reached by consensus. Social Insurance medical advisors participated in the process. The International Classification of functioning, disability and health (ICF) was used to describe impairments (body functions) and activity limitations.
Results: The experts identified several needs of revision. The recommendations of duration of sickness absence were differentiated according to factors such as comorbidity and severity. In the mildest cases no sickness absence was recommended for 13 of the 17 diagnosis and in diagnoses with more severe cases the need for a longer sickness absence was recommended. Partial sick leave was recommended in a higher degree that earlier. For several diagnoses information about impairments and activity limitations was inadequate or lacking. This information was completed for all 17 psychiatric diagnoses and coded with ICF.
Conclusions: Information about impairments and activity limitations is important when assessing work ability and together with more individualised recommendations of duration of sickness absence FMB may constitute a support for professionals and administrator at the insurance organisation.

3112

Outcomes-Based Education (OBE) Model for Nursing Colleges: An ASEAN Integration Initiative of Philippine Schools of Nursing

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Background:
Objectives:
Methods:
Results:
Conclusions:

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3113

Matching guideline questions to Cochrane Review questions – a linked data test case

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Background: Both guidelines and systematic reviews have defined clinical questions (Population Intervention Comparison Outcome - PICOs) at their core. Current standards for trustworthy guidelines mandate authors to use systematic reviews when developing guidelines. We have little knowledge about the overlap of PICOs needed for guidelines and those currently available from published systematic reviews. Cochrane and MAGIC are jointly exploring the potential mapping between PICOs used in current guidelines and relevant PICOs in Cochrane Reviews.
Objectives: To map the PICOs in guidelines with corresponding Cochrane Reviews, to: - Find the degree of overlap of the PICOs; - explore automatic mapping using PICO metadata (PICO annotation) and linked data technologies; - explore if such mappings can help guideline authors more effectively identify reviews relevant to them; and, - explore if such mappings can help systematic review-production prioritisation, by identification of answers needed by guideline producers.
Methods: Guidelines published on the MAGIC platform are mapped by comparing their PICOs with PICOs from existing Cochrane systematic reviews. Both manual and automated data mappings are used, and a comparison made between the two. Respective Cochrane Review Groups and guideline authors are engaged in the analysis.
Results: We will demonstrate: • A series of mappings between PICO data in guidelines on the MAGIC platform and in Cochrane reviews; • how 'PICO annotation' – the creation of PICO metadata – has been used to enhance discovery of links between guidelines in MAGIC and reviews in Cochrane; • how prototype software has been developed for the automated finding of PICO-based links; and, • insights and lessons learned from manual matching and automated linking respectively. Discussion: We will discuss ways in which PICO-based links between guidelines and systematic reviews might be useful for guideline developers and systematic review groups.

3114

World Health Organization mental health gap action programme (mhGAP) intervention guide: A review of evidence from low- and middle-income countries

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Background: Despite mental, neurological and substance use (MNS) disorders being highly prevalent, a vast gap exists between the need for services and their provision, worldwide. The World Health Organization (WHO) launched its Mental Health Gap Action Programme (mhGAP) in 2008, and the associated intervention guide (mhGAP-IG) in 2010. mhGAP-IG provides evidence-based guidance and tools for the assessment and integrated management of priority MNS disorders in low- and middle-income countries (LMICs), using clear protocols for clinical decision making. It is aimed at a non-specialised audience of primary care workers, but is also used by government ministries, non-governmental organisations and academic centres, to scale up mental health services in over 90 countries worldwide. Version 2.0 was published in 2016, reflecting updated evidence and feedback from field users.
Objectives: To identify the evidence base for the practical use of mhGAP-IG in LMICs, in terms of how it has been used, evaluated and reported.
Methods: A search of MEDLINE, Embase, PsycINFO, Web of Knowledge, Web of Science, Scopus, CINAHL, LILACS, ScieELO, Google Scholar and Cochrane databases for studies reporting evidence, experience or evaluation of mhGAP-IG use in LMICs, in English, Spanish, Portuguese, French or German. Additional papers will be identified by hand-searching references and contacting experts and key informants, including the mhGAP forum. Data will be extracted from all included papers to conduct a narrative review, where insufficient similarity is found between evaluation methods to conduct a systematic review.
Results: This review will be completed in May 2017, and the results presented at the Summit.
Conclusions: WHO's mhGAP-IG constitutes a landmark evidence-based tool to further its Comprehensive Mental Health Action Plan 2013-2020, aiming ultimately to achieve Universal Health Coverage. This presentation will discuss the evidence for how mhGAP-IG is being practically used in LMICs, its impact on mental health care, and will make recommendations for supporting field users to undertake evaluation, to inform future iterations of this important global evidence tool.

3115

Transferring evidence into practice: A Nursing Minimum Data Set within the nutritional area in primary healthcare

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Background: Malnutrition is a significant problem that can have serious consequences on the well-being of adults. Malnourished adults have increased hospitalisations and increased health complications. Thus, malnutrition can lead to increased healthcare costs and poor quality of life. In primary healthcare the prevalence of malnutrition ranges from 40%-90%. Although this is a serious and extensive problem, literature shows that malnutrition in the adult population is poorly recognised by healthcare professionals in primary healthcare. The early identification and observation of nutritional-related problems using structured and standardised documentation can potentially prevent the poor outcomes that are associated with malnutrition in primary health care. There are several ways to provide structure to nursing data and the Nursing Minimum Datasets (NMDS) are

one of the most notable structured documentation systems within nursing care, although being rarely used due to lack of transferring the evidence to usable knowledge.
Objectives: Development of a Nursing Minimum Data Set (NMDS) within the nutritional area in primary health care and the translation of this evidence into practice.
Methods: The NMDS developed in this study consists of elements from both validated nutritional screening tools and the clinicians- and patient perspective. The results of the comprehensive systematic literature search are published in a scoping review. The items identified in the scoping review needs to be translated into practice in order to accommodate the information needs of the target audience as well as using an understandable terminology (clinical language). A participatory workshop using affinity diagramming was utilised. Participants in the workshop consisted of future consumers of the NMDS (nurses, dieticians) and management (nursing leaders). Affinity diagramming is a simple and cost-effective technique for soliciting ideas from a group and obtaining consensus on how information should be structured.
Results: This study is ongoing. Both the process of transferring a NMDS into practice and the results will be presented at the Summit.

3116
Making evidence short, shareable and social

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Description: At Cochrane UK, we aim to disseminate health evidence and encourage engagement with it on social media. We have built a range of products that are designed to be 'short, shareable and social'. We have a blog, Evidently Cochrane, ‘blogshots’ (brief infographics summarising Cochrane reviews (Fig. 1)), vlogshots (short videos delivering key messages from Cochrane reviews) and tweetchats, online discussions of health evidence. Each of these products stand alone or form part of ongoing series, clearly tailored to specific audiences.
Objectives: This presentation will discuss the ways in which we monitor social media trends and the impact of our activities to create new evidence products. It will particularly focus on targeted dissemination, whether through targeted series aimed at a specific audience or content that is optimised for certain social media channels. The aim of the presentation is to raise awareness and use of reliable health evidence, especially (but not exclusively) Cochrane evidence, to inform clinical practice and health decisions through social media. It will aim to inform and inspire the audience to think of new ways to share research evidence.

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3117
Adapting foreign guidelines on post-stroke dysphagia identification and management to local context in China

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Background: Dysphagia is one common and severe symptom of post-stroke. Early identification and management can help to reduce the incidence of complications, lower medical cost and improve patients’ quality

of life. Foreign guidelines relating to post-stroke dysphagia identification and management are abundant and mature, while they may not be totally suitable for China's situation and should be localised. It's urgent to explore the way of localising foreign high-quality guidelines into China local context. Objective: To evaluate the quality of evidence-based guidelines related to post-stroke dysphagia identification and management, translate guideline recommendations into specific clinical audit criteria. Method: Search professional guideline websites; Database and Cross-media search engine with specific search terms and inclusion and exclusion criteria from 2010~2016 to obtain relevant guidelines. Critical appraisal the quality of final included guidelines with AGREE II. Rank those guidelines with A level, B level and c level. Extract recommendations related to post-stroke dysphagia identification and management in those A level guidelines and form the initial recommendation items pool. Select feasible recommendations from the initial pool and transfer those recommendations into clinical audit criteria both by stakeholder meeting.
Results: 5 pieces of evidence-based guidelines are finally included (Figure 1). The overall qualities are good. Two of them are ranked as A level guideline and the other three are rank as B level (Table 1). 24 recommendation items are extracted from those guidelines. Only 6 recommendations are selected to implement in the experimental unit according to the selection criteria. We transfer those 6 recommendations into specific clinical audit criteria by stakeholder meeting (Table 2). Discussion: There's still distance between China and foreign guideline development associations. The early identification and management are critical for patients' overall health status. We shall resort to the best-available evidence to guide clinical nurses' post-stroke dysphagia identification and management work.

Attachments: Attachments.pdf

3118
The effectiveness of low-power laser therapy for fibromyalgia: A systematic review

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Background: Fibromyalgia syndrome (FMS) is a disease with complicated condition and hard treatment. Research about the use of low-level laser therapy (LLLT) for pain reduction and tissue repair developed for more 30 years. However, these reports don't confirm the effect this therapy for patient with fibromyalgia or as a potential treatment option. Therefore, this study intends to perform quantitative systematic literature review to confirm laser specific effects and the dosage for patient with fibromyalgia.
Objectives: The objective of this review for fibromyalgia is to confirm the effect of low-level laser therapy in relieving chronic pain.
Methods: The search of the reports on interventions using LLLT for FMS was carried out in the PubMed, Medline, CINAHL, Cochrane, Embase, ProQuest, EBSCO, Google scholar and CEPS. Randomised-controlled clinical trials published over the past years either in English or Chinese. The methodological quality of the studies was assessed using the JBI-MAStARI. The analysis on the study results was done via the review of the content.
Results: We identified 6 randomised controlled trials including a total of 225 patients. Most of the studies used the criteria of the American College of Rheumatology for the clinical diagnosis of FMS. Pain scale and Fibromyalgia Impact Questionnaire (FIQ) were the most frequently used in evaluating FMS. Their scores reduced significantly in all of the studies, which mean LLLT has effectiveness in the treatment of fibromyalgia. But one study found FIQ scores were picked up again after six months, thus the effect of laser treatment in patients with FMS may be short-term.
Conclusions: LLLT treatments are effective for decreasing pain and increasing function of life in FMS patients. From these reviews, there are still limitations on the effect of the LLLT, and also about the adverse reactions and effective doses of the FMS treatment. Many differences of wavelengths of laser, the energy of density and the duration was found between each article. Further studies are needed to establish the effective dosage, duration and interval of LLT in treating FMS

3119

Development of a critical-appraisal tool for hospital clinical practice guideline in Cipto Mangunkusumo General Hospital, Indonesia

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Background: According to the Minister of Health's decree concerning medical service standards, clinical practice guidelines (CPG) are one of the essential documents to guide healthcare service based on best-available scientific evidence. Throughout the years, a large number of hospital CPGs have been developed in Cipto Mangunkusumo General Hospital, Jakarta, Indonesia. Nevertheless, the quality of the CPGs is yet to be assessed.
Objectives: To develop a critical- appraisal tool that address the government's requirement for hospital CPG.
Methods: An initial review of the existing appraisal tools was conducted to select the questions to be included in the critical-appraisal tool. Subsequently, a Delphi panel was established to build a consensus for the appraisal tool.
Results: According to MoH's decree concerning medical service standards, hospital CPGs should comply with 5 domains, i.e. validity, systematic, evidence-based, updated, and clearly written. An initial list of 22 questions, of each was coherent with at least one of the abovementioned domains, was identified through the review of existing appraisal tools. A Delphi panel consisting of methodological and clinical experts was developed and went through two rounds of the Delphi process to refine the initial lists of questions. A consensus of the Delphi panel decided the final hospital CPG appraisal tool consisting of 14 questions.
Conclusions: A critical-appraisal tool addressing 5 important domains for hospital CPG has been developed to ensure the quality of CPGs in Cipto Mangunkusumo General Hospital. The tool can also be used as a guide when initiating CPGs development in the hospital.

3120

Evidence Maps: A tool for stakeholder-engaged health-policy development

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Background: Healthcare policy and programmatic decisions are often made in the absence of relevant and useful information, despite the collective efforts of researchers across the globe. The evidence gap between research and action highlights the need to identify and disseminate research findings stakeholders involved in healthcare decision making. Evidence maps are an emerging evidence synthesis tool, employing rigorous and replicable techniques to potentially bridge this gap. In 2016, Rhode Island (RI) Arts & Health Advisory group was charged with developing a set of evidence-based policy recommendations to integrate patient- and systems-level, arts-based interventions within a statewide population health plan. These recommendations, informed by an evidence map of existing studies, will be considered by the RI Departments of Health and Health and Human Services.
Objectives: Our year-long project included evidence synthesis methods training to create an arts interventions evidence map to elucidate the distribution of available evidence, engage key stakeholders to contextualise these findings and how they comport with the lived experience of healthcare providers and, patients in our state.
Methods: We convened a number of stakeholder engagement sessions and a one-day methods training workshop, culminating in a draft evidence-map protocol, evidence synthesis with analyses and dissemination of

findings.
Results: The report will be submitted in the Summer 2017. Our interim findings demonstrate the Advisory Group learned to become good stewards of evidence and describe improved competency in self-advocacy using evidence to inform decision making. Further, the group combined their newly-acquired research skills and existing skill sets to develop new and creative ways to disseminate these research findings to the communities they serve.
Conclusions: The collaboration resulted in bi-directional learning between researchers and artists. Our experience demonstrated the utility of using evidence maps to guide actionable public health policy recommendations and the import of interprofessional collaboration to innovate evidence synthesis.

3121
Testicular cancer - methodological quality of clinical guidelines and systematic reviews

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Background: Testicular cancer refers to a malignant disease that originates from the germ cells of the male testis. It represents 1% of male cancers and 5% of urological tumours. Nevertheless, its incidence in industrialised countries has been increasing during the last decades. This study forms part of our clinical guidelines development programme.
Objectives: The aim of this study is to identify and evaluate the current evidence on diagnosis, therapy and follow-up of patients with testicular cancer.
Methods: We conducted systematic literature searches to identify systematic reviews, meta-analyses and clinical guidelines using Medline, Embase, Cochrane Library and the websites of GIN, NGC, NICE, SIGN, CCO, Oncoline, EAU, AUA (including the years 2010 to 2016). The quality of the retrieved information was assessed by two reviewers independently using AMSTAR for reviews (11 questions, 0-11 points) and AGREE II for guidelines (6 domains, 0-161 points).
Results: We retrieved 439 citations and included 59 systematic reviews and 13 clinical guidelines. None of the systematic reviews achieved a good rating (9-11 points). 38 reviews were rated as bad (0-4 points) and 21 as of moderate quality (5-8 points). The content of the moderate rated reviews is divers and covers risk factors (N = 10), screening/prevention (N = 3), diagnosis (N = 2), therapy (N = 3) and toxicity (N = 3). According to Oxford, the level of evidence was 1a-3a. The guidelines were developed in the United States (N = 5), Canada and Europe (each N = 3), Scotland and Belgium (each N = 1). 8/13 reached at least 50% of the total possible scores, only 1 reached more than 80%. Applicability was the domain worst rated (8/13 of the guidelines <20% of the scores).
Conclusions: Our study showed that aggregated evidence from systematic reviews and clinical guidelines for testicular cancer is limited and of moderate to poor quality. Guidelines lack most notably clear hands-on recommendations on how to put the content into clinical practice as well as naming indicators for implementation evaluation. They may therefore only contribute little to quality improvement in clinical care.

Attachments: Abstract KZT__english.pdf

3122
Project Transform: Supporting Australian guideline developers to access and use research evidence

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Background: Many organisations in Australia undertake systematic reviews to inform development of guidelines (or would like to do so). However, the substantial resources required to produce systematic reviews limit their feasibility for guideline development. Project Transform aims to significantly reduce the time and resources required to produce systematic reviews and the health guidelines they support. Over three years (2016-18) we are working with Australian guideline developers to design, build and test systems that will make creating evidence-based guidelines easier and more efficient. Objectives and
Methods: To understand the evidence needs of guideline developers and to inform the development of potential tools and services, we conducted 16 semi-structured interviews with Australian guideline developers. Developers were involved in different types of guidelines (e.g. narrow or broad in scope), represented both new and established guideline groups, and had access to widely different levels of resources. Results and Discussion: All guideline developers recognised the importance of having access to timely evidence to support their processes, but were frequently overwhelmed by the scale of this task. Groups developing new guidelines often underestimated the time, expertise and work involved in completing searching and screening. Among existing guideline developers, many were grappling with the challenge of updating and were keen to explore alternatives to the blanket updating of the full guideline. Horizon-scanning and evidence signalling were seen as providing more pragmatic approaches to updating, although some were wary of challenges posed by receiving evidence feeds on a too-frequent basis. Respondents were aware that new technologies, such as machine learning, were becoming routine and offered potentially large time and resource savings. The responses show that guideline developers would benefit from the kind of tools and services (e.g. machine classifiers, crowd sourcing) that Cochrane is now implementing. During 2017, we will be working with Australian guideline developers to design and pilot evidence services tailored to their needs.

3123

Updating the National Disease Management Guideline for Non-specific Chronic Low Back Pain – a best-practice example

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Background: A full update of a guideline is very resource intensive, thus often only partial updates are conducted. This can lead to inconsistencies in content and methods within the guideline.
Objectives: We aimed to analyse the feasibility of the full update strategy for the National Disease Management Guideline (NDMG) Low Back Pain.
Methods: Systematic reviews (SR) on the diagnosis and treatment of low back pain were systematically searched in Medline and Cochrane. Identified SR were assessed with AMSTAR and allocated to the recommendations. Recommendations, which needed further discussion, were directly referred to working groups. For all others, recommendations and new evidence was presented to the guideline developing group using an electronic survey tool to find a consensus. Non-consented recommendations were referred to working groups. Working groups discussed evidence and recommendations, which were subsequently formally consented in the guideline developing group.
Results: The systematic search identified 648 SR, 172 SR were included and allocated to recommendations. The guideline consists of 90 formally consented recommendations, 37 were referred directly to the working groups; 53 were presented using the electronic survey-tool and 28 of those were consented in the first round. Response rates ranged between 86% and 100%. Working groups needed 10 telephone conferences and 2 face-to-face meetings to discuss evidence for the 65 recommendations. Afterwards recommendations were formally consented. It took 18 months from initiating the update to the publication for external review. This was comparable to the update of the NDMG Diabetic Retinopathy (19 months, 32 recommendations) or the update of the chapter 'diagnosis' of the NDMG Coronary Heart Disease (19 months, 25 recommendations).
Conclusions: The strategy was very useful for updating the NDMG low back pain. The transparent electronic presentation of new evidence for existing recommendations saved time by filtering those recommendations that

are still adequate and congruent with new evidence. The amount of time was comparable to the update of a major chapter of a NDMG.

3124

Wikipedia: An important dissemination tool for Cochrane

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Background: The Cochrane-Wikipedia partnership, formalised in 2014, supports the inclusion of relevant evidence within all Wikipedia health articles, as well as processes to help ensure that health information included in Wikipedia is of the highest quality and accuracy. In 2016, Cochrane Global Ageing worked on improving the health content on Wikipedia on topics related to ageing.
Objectives: To work with a group of volunteers in improving Wikipedia articles of relevance to ageing and, where available, reference Cochrane evidence within these articles.
Methods: Four volunteers contributed during four months, at aproximately four hours a week, for this project. They received 4 times one hour of online training from Wikipedia to ensure they were comfortable editing Wikipedia content. Cochrane, through Cochrane Global Ageing, provided content guidance. Cochrane CET provided project-management support.
Results: During the four months' period, the volunteers edited 106 articles, and added over 16 000 words to these articles. The articles were viewed 9,35 million times by the end of the project period.
Conclusions: Many people use Wikipedia as the place to go when looking for health information. The statistics of this project confirm this. If Cochrane wants its health evidence be used by the general public, investing in Wikipedia makes sense. The volunteer model worked well: after a short training the volunteers were capable of editing articles. Wikipedia maintains a list of articles most read and their quality. Cochrane groups could use this list as a starting point to see where contributing their evidence would reach a large public. Groups can also consider working with student volunteers, guided by the review authors if needed, so that Wikipedia editing becomes one additional dissemination channel for Cochrane Reviews.

3125

Encyclopaedia of clinical guidelines in South Africa – A mapping project

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Background: South Africa is developing National Health Insurance (NHI), which will require coordination of health provision across sectors. Clinical practice guidelines (CPGs) are a tool for implementing care. Therefore, it is important to explore the current landscape of CPGs in SA including what is available and who is leading their development.
Objectives: We aimed to identify and describe all available CPGs in South Africa.
Methods: We conducted a cross-sectional evaluation using a two-part search process: an iterative, electronic search of the grey literature and relevant websites (143 websites searched); and a systematic search for peer reviewed literature (PubMed). CPGs were extracted by one reviewer, including a description of the developer, condition, and reporting of items associated with quality CPGs.
Results: The search was conducted between September and December 2017. We retrieved 243 CPGs published after January 2000. 140 were developed in the past five years. Developers include National and Provincial Department of Health (DoH), professional societies, ad hoc collaborations of clinicians, and the Council for

Medical Schemes. Topics varied: the DoH focused high-burden conditions, on HIV/AIDS, TB and Malaria, and CPGs from other developers focused on non-communicable diseases. 39% of CPGs developed by societies or clinicians included a conflict of interest statement compared to 5% of DoH CPGs.
Conclusions: Accessing CPGs was challenging, requiring extensive searching. South Africa has many contributors to CPG development from all sectors and across disciplines, but there is no evidence of coordination or prioritisation of CPG development. CPGs identified were often out of date and quality was poorly reported, impacting on the usability and credibility of those available. Exploring the CPG landscape suggests next steps to support the NHI may include maintaining an accessible CPG repository; and establishing a national coordinating unit responsible for developing standards and supporting high-quality development.

3126
Impact of point-of-care diagnostics on maternal outcomes in HIV-infected women: Systematic review and meta-analysis

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Background: World Health Organization advocates for increased accessibility of HIV-related point-of-care (POC) diagnostics in settings that lack laboratory infrastructure.
Objectives: The objective of this study is to assess the impact of POC diagnostics on maternal health outcomes in HIV-infected women.
Methods: Systematic literature review using multiple data sources: Cochrane Infectious Disease Group Specialized Register; Cochrane Central Register of Control Trials, published in the Cochrane Library; PubMed; EBSCOhost and LILACS from January 2000 to October 2015. References of included studies were hand searched. Randomised-controlled trials (RCTs) and observational studies examining health outcomes of HIV-infected women were eligible for inclusion in this review. The Cochrane Risk-of-Bias tool was used for bias assessment of the included studies. PRISMA guidelines were used for reporting.
Results: Of the 695 studies identified, six retrievable studies (five cross-sectional studies and one case-control study) met the inclusion criteria and were included in this study. The included studies examined a total of 167 HIV-infected women in different study settings. No studies reported evidence of CD4 count, viral load and TB and the syphilis POC test impact on HIV-infected women was not found by this study. Included studies reported the impact of various HIV rapid tests across the following five maternal outcomes: Timely receipt of results with pooled effect size (ES) = 1.00 (95% confidence interval [CI]: (0.98; 1.02); enabling partner testing, ES = 0.95 (0.85; 1.04); prevention of mother-to-child transmission of HIV, ES = 0.86 (0.79; 0.93); linkage to antiretroviral treatment (ART), ES = 0.76 (0.69; 0.84) and; linkage to HIV care, ES = 0.50 (0.18; 0.82). No studies reported evidence of the impact of POC testing on maternal mortality or maternal and child morbidity of HIV-infected women.
Conclusions: The review provides an international overview of the impact of HIV POC diagnostics on maternal outcomes in HIV-infected women.

Attachments: Abstract submited to CT conference.pdf

3127
Use of Cochrane reviews in guidelines for general practitioners

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Background: The Dutch College of General Practitioners has a guideline programme consisting of approximately 100 evidence-based guidelines. Preferably we base our recommendations on systematic reviews of high quality that specifically provide us with an up-to-date summary of the evidence to answer our PICO-formulated key-questions.
Objectives: To assess the uptake of Cochrane reviews (CR) in guidelines for general practitioners.
Methods: We extracted 42 therapeutic PICO-questions from 3 recent (>2015) guidelines on urinary stones, knee complaints (knee osteoarthritis and patellofemoral pain syndrome) and non-specific low back pain. We searched for potentially relevant CRs in the Cochrane database answering our PICO-questions and whether these were used for answering our questions in the selected guidelines. In addition, we analysed reasons for not using available CRs.
Results: For 32 of the 42 (74%) PICO-questions a CR was available. For 26 (60%) PICO-questions a CR was used to summarise the evidence. When a CR was available, reasons for not using it were that a CR did not fully match the PICO-question (n=1) or an overview/NMA based on Cochrane methodology was available outside the Cochrane library (n=5). If a CR was used they were rarely up to date and it was necessary to perform an update of the literature in most cases (88%). Conclusion: Although CRs were available for the majority of the PICO-questions in our selective sample of Dutch guidelines for general practice, their use seems not to be optimal. The mismatch between available Cochrane reviews and general practice guideline could be reduced by formulating PICO questions based on knowledges gaps raised from guidelines. To improve the production of relevant Cochrane reviews and to increase their clinical impact, guideline developers and (Cochrane) systematic reviewers should work more closely together.

3128
Methodological tasks of clinical practice guidelines developed in Japan

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Background: The Japan Council for Quality Health Care (JQ) has managed evidence-based medicine promoting project which works on the evaluation, certification and dissemination of clinical practice guidelines (CPGs) developed in Japan as a guideline clearinghouse.
Objectives: To clarify the methodological tasks of CPGs developed in Japan.
Methods: After searching and screening with exclusion criteria, we evaluated identified CPGs from the aspect of methodological quality using Appraisal of Guidelines for Research & Evaluation II Instrument (AGREE II) by guideline evaluation expert committee. Each guideline was evaluated by 4 expert members, and CPG evaluation conferences were held to facilitate consensus-building among members. We adopted the second scoring after the conferences and calculated the mean scores of domains and items of AGREE II. In this study, we focused on the domain 3 (Rigour of Development).
Results: A total of 441 guidelines were evaluated by the AGREE II from September 2011 to January 2017. The mean scores of each AGREE II domain (0-100%) were as follows: Scope and Purpose, 63.0%; Stakeholder Involvement, 47.8%; Rigour of Development, 40.8%; Clarity of Presentation, 59.8%; Applicability, 44.5%; Editorial Independence, 38.7% and Overall Guideline Assessment, 50.4%. The low-scoring items in the mean scores of Rigour of Development (<3.5, range 1-7) were as follows: item 7 (search methods), 3.3; item 8 (evidence selection

criteria), 2.8; item 9 (strengths and limitations of the evidence), 3.2; item 10 (formulation of recommendation), 3.3; item 13 (external review), 2.8; and item 14 (updating procedure), 3.2.
Conclusions: This study indicates that Japanese CPGs have some tasks regarding description of evidence selection criteria and external review. As evaluation report leaves much to be desired in other items, it is necessary to utilise the evaluation results effectively for quality improvement. We are preparing to hold the meeting with guideline development group (GDG), and to support GDG individually.

3129

Systematic review of clinical practice guidelines in the diagnosis and management of ST-elevation myocardial infarction

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Background: The uncertainties regarding multiple guidelines has dramatically altered ST-elevation myocardial infarction assessment and management, physicians require systematically and transparently developed recommendations.
Objectives: This systematic review assesses the quality and consistency of these multiple guidelines of international clinical practice guidelines (CPGs) for the diagnosis and management of ST-elevation myocardial infarction to assist physicians in making appropriate recommendations.
Methods: We chose three CPGs on the management of ST-elevation myocardial infarction (STEMI) published before December 2016 were retrieved. Four reviewers independently assessed the rigour of guideline development by using the Appraisal of Guidelines Research and Evaluation II (AGREE-II) instrument, and their reported evidence was evaluated.
Results: Three eligible guidelines were included: two had been developed by professional organisations (NICE, 2013 and SIGN, 2016), and one guideline was endorsed by an independent regional body (Taiwan, 2012). Three guidelines achieved a score of greater than 50% in all six AGREE-II domains. Most CPG recommendations on the management of STEMI were relatively consistent. Guidelines varied regarding the indication of morphine for chest pain, as well as in their suggestions for aspirin dose.
Conclusions: Our analysis showed that the current CPGs varied in methodological quality. More effort is needed to improve the quality of recommendations on the diagnosis and management of ST-elevation myocardial infarction.

3130

Selecting tools to assist general practitioners in the diagnosis and assessment of severity of work-related mental health conditions

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Background: Claims for work-related mental health conditions (MHCs) are increasing. In Australia, general practitioners (GPs) see approximately 96% of injured workers, and play a key role in facilitating recovery for people with work-related MHCs. However, GPs have expressed difficulties with diagnosing and managing work-related MHCs. This is being addressed by the development of a 'Clinical Guideline for the Diagnosis and Management of Work-Related Mental Health Conditions in General Practice'. A key question to be addressed in this guideline is whether tools exist to assist in diagnosing such conditions.
Objectives: To identify clinical assessment tools, that can be used by GPs to facilitate the accurate diagnosis of work-related MHCs and their severity.

Methods: We undertook a systematic search of the literature in MEDLINE, EMBASE, PsycINFO, and CINAHL, using a combination of MeSH terms and keywords reflecting work-related MHCs, assessment tools, sensitivity and specificity, and general practice. The search was limited to papers published in English, with no set date limit. All identified tools were evaluated using the health-technology assessment criteria for patient-based outcome measures; for use in a narrative appraisal of the tools. Case screening and diagnostic classifications data were extracted for use in diagnostic accuracy testing (DAT); meta-analysis of sensitivity and specificity, or receiver operator curve, using tool cut-offs that indicate a positive screen/diagnosis or levels of severity.
Results: Sixty assessment tools were identified from 41 publications (38 studies). Twenty-three tools were not relevant to work-related MHCs and were therefore excluded. The thirty-seven remaining tools had limited reliability, validity, sensitivity and specificity testing in the work-related MHCs context, precluding DAT.
Conclusions: There are few studies that identify clinical assessment tools in the work-related MHC and general practice context. This limits the evidence base to support guideline recommendations for the diagnosis of MHCs and their severity in this context.

3131

Describing a user-centred approach to developing key clinical questions for guidelines for general practitioners

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Background: Involving guideline users during the development of a guideline increases the likelihood that the guideline will be implemented. This is because an inclusive approach highlights the needs of users and the contextual factors that might influence implementation. Our team is creating a clinical guideline entitled 'Clinical guideline for the diagnosis and management of work-related mental health conditions in general practice', in response to increasing commitment from compensation schemes to improve patient outcomes. However, GPs are a challenging cohort for guideline implementers to influence. One potential way to increase the likelihood of guideline uptake by GPs is to create key questions based on the Clinical Reasoning Framework, which is the systematic approach that GPs use to investigate and manage symptoms. Objective: To apply a user-centred approach, involving the Clinical Reasoning Framework for the development of key questions for the work-related mental health guideline for GPs.
Methods: International best-practice approaches were used to create the overarching process for development of key questions. We then integrated steps to obtain and organise clinical perspectives of GPs into this process.
Results: A seven-step approach to the development of the guideline questions was created. These are: 1) Define the rationale for the guideline; 2) Generate an initial list of questions based on qualitative interviews with primary end-users (GPs) and secondary end-users (psychiatrists and compensation scheme workers), and extend these findings with a literature review. Qualitative data was analysed using the Clinical Reasoning Framework to; 3) Define the key questions; 4) List the relevant outcomes; 5) Review and revise the draft key questions; 6) Prioritise draft key questions; and, 7) Decide on the final list of key questions.
Conclusions: The Clinical Reasoning Framework can be used as an innovative approach to determine guideline questions for GPs.

3132

Reviewing systematic reviews: Can technology boost children's learning? A meta-analysis of What Works Clearinghouse (WWC) early childhood education programmes

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Background: Computer-assisted interventions (CAIs) have become increasingly popular as an alternative to the traditional intervention (non-CAI) on improving children performance on various topics. CAIs are usually associated with moderate learning gains for school-age children. This research is to investigate if CAI is a useful tool to enhance learning skills in preschool children. We outline findings from the meta-analysis of WWC-reviewed evaluations in the area of Early Childhood Education (ECE). The dataset is drawn from the WWC public database and consists of 48 studies and 275 effect sizes. Research questions: Does the evidence in WWC reports indicate that CAIs programs improve cognitive, math and literacy outcomes for preschoolers (3- to 6-year-old children)? Are CAIs more effective than non-CAIs in increasing learning gains of pre-schoolers?
Methods: First, a meta-analysis is performed to synthesise evaluations of ECE programmes. We calculate summary statistics from 48 ECE studies, and separately for 10 CAI studies and 38 non-CAI studies. Then, we compare the effectiveness of CAIs with non-CAIs reviewed within the ECE topic area. The comparison is made in a random-effects model by meta-regression technique. Because several effect sizes (ESs) can be nested within a study, our study uses the robust variance estimation procedure to adjust for the within study dependencies among effect sizes (Hedges et al., 2010).
Results: The study finds that ECE interventions are associated with substantive learning gains (ES=0.28), with CAIs (0.42) seemingly outperforming non-CAIs (0.24). However, results from meta-regression show that the difference in effectiveness between CAIs and non-CAIs is not statistically significant. Among seven moderator variables, the sample size plays a critical role, indicating that studies with smaller sample sizes are associated with larger learning gains.
Conclusions: The findings are discussed in light of our previous work on CAIs for beginning readers (grades K-3).

3133
Adverse effects reviews of opioids - a key element for balanced systematic reviews and guidelines

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Background: Prescription opioids are the leading cause of injury deaths and considerable morbidity in the US and other developed countries. In large part this began because of unsupported claims of effectiveness and lack of adverse effects. However, regulatory approval documents and many guidelines still do not balance known adverse effects with evidence of effectiveness. Both patients and clinicians often underestimate the risk of adverse effects. Further, informed consent discussions are hampered by lack of synthesised data to support risk vs. benefit discussions.
Objectives: To review and summarise the adverse personal and population effects of acute and chronic opioids to compare to benefits. To support clinician, patient and policy maker informed decision making, considering risks vs. benefits
Methods: We used the Cochrane Adverse Effects Review methodology to search, critically assess and synthesise the literature about the adverse effects of acute and chronic opioid use.
Results: Opioids affect most organ systems, posing risks to the respiratory, neuropsychiatric, gastrointestinal, endocrine, cardiovascular, vestibular, musculoskeletal, genitourinary/reproductive and other systems. These effects appear to be related to dose, age, gender, comorbidity, and concurrent use of multiple opioids and sedative/hypnotic and psychiatric medication. We noted increased incidence of falls, fractures, endocrine suppression, overdose, mortality, vehicle crashes, birth defects, cardiorespiratory events, effects on CNS structure and function, and adverse interactions with psychiatric disorders and medications. Review of observational studies is an important part of comprehensive adverse-effects reviews.
Conclusions: Clinicians, patients, medical organisations and policy makers have not explicitly considered the many effects of opioid use on personal and public safety, quality of life, function and avoidable adverse health effects. Guideline developers, and all other stakeholders, need full information about benefits, risks, and adverse

effects and risks to inform recommendation development and decision making about the use of opioids.

3134

Impact of a guideline update on recommendations and didactic material: The example of AFAM (African First Aid Materials)

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Background: In 2011, Belgian Red Cross developed first aid and prevention guidelines adapted to the sub-Saharan African context, according to the principles of Evidence-Based Practice. In 2016, these guidelines were updated, taking into account the latest scientific evidence, expert opinions and target group preferences, and using a vastly improved methodology.
Objectives: We aimed to assess the impact of this update, by determining how changes in scientific evidence, expert opinions and target group preferences between 2011 and 2016, as well as methodological improvements, led to alterations in the current recommendations and manual.
Methods: Changes in scientific evidence were determined by comparing the number of studies that were included as a basis for the 2011 and 2016 guidelines. Expert opinions were gathered during a 2016 online multidisciplinary African expert panel meeting. Feedback from the target group was collected via African Red Cross societies.
Results: In 2011, 27 topics (e.g. burns, diarrhoea) were addressed using 27 questions and corresponding search strategies. In contrast, during the 2016 update, 114 individual PICO questions (including 50 PICOs with interventions specific to the African context) and search strategies were defined for the same 27 topics, thereby increasing search sensitivity. The total number of studies included as scientific evidence increased from 248 in 2011 to 295 in 2016. This new scientific evidence led to changes in 10 recommendations, of which the majority addressed first aid (2 changes) and prevention (4 changes) of diarrhoea. Four other recommendations were altered because of changes in expert opinions. At the request of the target group, additional background information on several topics was added to the manual.
Conclusions: Updating the African first aid and prevention guidelines has exposed new scientific evidence, fine-tuned expert opinions and revealed new target group preferences. Moreover, methodological improvements have led to more sensitive searches of evidence and identification of additional relevant evidence. A five-year update of evidence-based guidelines is therefore worthwhile and warranted.

3135

From populations to people - how NICE guidelines support shared decision making

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Background and aims: There is an acknowledged tension between population-level recommendations within clinical practice guidelines and a person-centred approach to decision making for individuals (1). The National Institute for Health and Care Excellence (NICE) recommends the most clinically and cost–effective care for people using the healthcare system in England. We also support the rights of people to make informed decisions about their care within a range of clinical and cost–effective options. We wished to explore how we might support both these aims.

Methods: In 2015 NICE convened the Shared Decision Making Collaborative: A network of people with knowledge of, interest in and commitment to shared decision making (SDM). The collaborative includes academics, policy makers, practitioners and professional and patient organisations. The collaborative has developed a consensus statement(2) and an action plan(3) with specific short-term intentions and long-term ambitions. The collaborative will meet again in the summer of 2017 to discuss progress against the action plan and identify further areas for action.
Results: NICE's activities to support this work include the following: • changes to the NICE methods and process manual (4) to better support inclusion of SDM in guidelines; • building on our existing collection of decision support tools (5); • a proposed approach for quality assuring decision-support tools; • advocacy for funding for SDM research; • considering how to record SDM in clinical encounters; and, • negotiation to develop a clinical guideline on best practice in SDM. Conclusion: The SDM Collaborative has catalysed endeavors to promote high-quality SDM, supporting the wider cultural change needed to embed it in routine healthcare delivery and identifying practical actions to make this possible. Led by NICE, the collaborative demonstrates the need for a collective approach to seeing SDM as the norm for how healthcare is delivered. NICE has responded to the collaborative's work by enhancing its own role in promoting evidence-based good practice while supporting SDM.
References (attached separately)

Attachments: GES2017 - From populations to people - using guidelines to share decisions - reference list.pdf

3136

Development of an evidence- and narrative-based patient decision aid for secondary prevention of myocardial infarction

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Background: Cardiovascular diseases (CVDs) are the top causes of death worldwide. In China, CVDs affected 29 million patients in 2013, 2.5 million of whom had prior myocardial infarction. Prevention is the best treatment for myocardial infarction. With a variety of pharmaceutical interventions at hand, consumers urgently need a tool to assist them in the decision-making process.
Objectives: A patient decision aid (PDA) comparing preventative treatments for myocardial infarction is developed using methods and techniques of evidence-based and narrative-based Medicine, to fill the gaps in the implementation of these interventions in primary healthcare.
Methods: The PDA contains primarily statistical evidence from synthesis of quantitative study and narrative evidence from synthesis of qualitative study. Steps to generate statistical evidence include: 1) make a list of commonly used drugs for infarction prevention through systematic search; 2) collect original data of pre- and post-market clinical research from open and grey sources; 3) conduct network meta-analysis to compare multiple interventions on outcomes such as efficacy, safety, economics and acceptability; 4) transform statistics into easily comprehensible evidence; and, 5) evaluate the evidence using GRADE Profiler. Steps to generate narrative evidence include: 1) plan in-depth interviews with target consumers; 2) collect stories of searching for medical solutions regarding infarction prevention; 3) analyze and synthesise texts using Altas.ti; and, 4) transform stories into narrative evidence. Innovative features: Comparisons between single drugs (such as statins) with drug combinations (such as statins and blood-invigorating and qi-tonifying Chinese patent drugs) and comparisons between combined use of western drugs with combined use of western drugs and traditional Chinese patent drugs will be made, to fit in the real-world situation. Narrative evidence may provide psychological support for those in need.
Conclusions: The PDA could be an effective evidence tool to implement preventative measures for myocardial infarction and facilitate shared decision making at the primary care level.

3137

Analysis of publication characteristics for Campbell systematic reviews

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Background: The purpose of the Campbell library is to maintain and promote systematic reviews on social sciences so that provide evidence-informed decision making.
Objectives: In order to provide resources and guidance in the field of social sciences by analysing the publication characteristics of Campbell systematic reviews.
Methods: Literature searches of Campbell reviews were conducted. Two authors independently extracted the information on inclusion studies using Microsoft Excel 2007, which included study characteristics, type of document, methods of data collection and analysis.
Results: Three hundred articles met the inclusion criteria. The first Campbell systematic review was published in 2004. The correspondence author in 108 (36%) articles come from the United States, 22(7.3%) from Denmark, 18(6%) from Australia, 17(5.7%) from Canada, 14(4.7%) from Norway, Asia, Africa, and South America have relatively few authors, show in Figure 1. The funding accounted for 72.7%, 16.3% no funding and 11% unclear. 230(77%) were the title of systematic review in Campbell library, 224 (75%) were protocol, 150(50%) were review; 92(30.7%) were user abstract; 36(12%) were plain language summary. The results of methods of data collection and analysis shows that software for documents management mainly included EPPI reviewer (2.3%), Endnote (2%), RefMan (0.7%), Refworks (0.7%); Software of screening included Microsoft Excel (5.3%), Endnote (2.3%), EPPI reviewer (1%); Software for data synthesis included Revman (17.7%), Comprehensive Meta-analysis (9.3%), stata (7.3%), SPSS (3.7%), SAS（2.7%） meanwhile, assessment tool for risk of bias mainly included Cochrane Risk-of-Bias tool (22.7%), A risk-of-bias model (Reeves,Deeks, Higgins & Wells) (3.3%), EPOC ROB Tool (2.7%).
Conclusions: Campbell reviews provide new ideas for the development of evidence-based practice, especially in developing countries.

Attachments: fig 1.png

3138

A systematic review and meta-analysis: The effectiveness of animal-assisted interventions for common mental disease

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Background: Animal-assisted intervention plays an important role in improvement of mental health and elimination of sense of isolation.
Objectives: We conducted a meta-analysis of randomised-controlled trials to systematically evaluate the efficacy of AAI for mental disorders.
Methods: Relevant articles published were identified in PubMed, Embase, the Cochrane Library, Web of Science and Chinese Biomedical Literature Database. Study characteristics, population characteristics, animal-assisted intervention, measurement instruments of outcome were extracted. The evaluated outcomes included quality of

daily life, behavioural and psychological symptoms, and mental condition. The effect sizes were calculated that the change in mean outcome from pre-test to post-test in the intervention group minus that same change in control group. All statistical analyses were performed with STATA version 12.0 software.
Results: 18 studies were identified. According to meta-analysis, we found that AAI have a significant effect on the quality of daily life with psychiatric disorders (SMD 1.42, 95% CI 0.05 to 2.78), and on the behavioural and psychological symptoms with depressive disorders (SMD 3.79, 95%CI 1.90, 5.68). We identified a difference between 2 to 3 monthes after AAI for quality of daily life with mental disorders (SMD 0.79. 95%CI 0.28, 1.30).
Conclusions: The present meta-analysis suggests that AAI can improve quality of daily life with psychiatric disorders, and behavioural and psychological symptoms with depressive disorders.

3139
Can we make patient versions of guidelines more applicable to patients and the public?

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Background: There is increasing interest and effort from guideline developers to produce patient versions of clinical practice guidelines and related products for dissemination to the public. An enduring concern associated with these efforts is that patients and members of the public may not view the guidelines as applicable and relevant to them, failing to reach the intended audience. Objective: To identify criteria for personalising health information and recommendations in patient versions of guidelines to ensure they are viewed as relevant, applicable and are accessed.
Methods: We conducted a focus group and individual semi-structured interviews with 10 members of the public interested in healthy aging. Qualitative content analysis was used to identify themes relating to personalisation and presentation of patient versions of guidelines.
Results: The main themes identified for the personalisation of guidelines included introducing who the guideline is for, describing specific characteristics of the target audience, using a presentation format directed to the individual, and providing a direction on next steps after reading the information. All participants viewed guidelines as useful, particularly for informed discussion with their healthcare provider. When judging the relevance of a specific guideline and deciding to read it, participants typically considered their current health situation or their family history. A general description of patient characteristics and risk factors for the guideline target audience was viewed as way of identifying applicability. Commonly suggested features of the presentation format were an attention grabbing title and introduction, an easy to read format with short narrative and bullet points, and the use of personal pronouns in the presentation of information and recommendations.
Conclusions: We identified criteria for taking personalisation into consideration to improve current patient versions of guidelines. Guideline developers may apply the proposed solutions to their patient versions aiming to ensure that they are accessed and viewed as relevant and applicable by patients and members of the public.

3140
The analysis of appraisal of Chinese clinical practice guidelines

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Background: As a widely employed appraisal tool, AGREE is recognised for its reliability and authority. However, when it comes to China, some researchers questioned that it might not be perfectly matched to the local situation.
Objectives: To analyse studies about the appraisal of practice guidelines in China.

Methods: We systematically searched Chinese databases (CNKI, Wanfang data and CBM). For complementary searches we retrieved the references of included studies. Four researchers in 2 groups screened studies and extracted information independently.
Results: Fifty-eight studies, published from 2005 to 2016, met our criteria, they were from 26 journals and included guidelines regarding diagnosis and intervention, 35 studies only evaluated Chinese guidelines. We could divide included studies into 3 types: quality appraisal using AGREE (15.5%) or AGREE II(46.6%), application evaluation(12.1%) and practice evaluation (15.5%) using standardised questionnaires. On top of the quality evaluation, the complaint about AGREE focused on: (1) Not being applicable for Chinese guidelines, it is hard to evaluate the actual quality from a poorly reported document, which is quite common among guidelines in China; 2) only evaluating the methodological quality, the appraisal result is not equal to the quality of content in guidelines; and, 3) being hard to judge the overall quality of a guideline. What's more, 50% of the quality evaluation studies appeared unsatisfied with AGREE, 16.7% stated that they were urgent for a localised appraisal tool designed for China.
Conclusions: At present AGREE might be the best tool for guideline appraisal, but it is necessary to develop a new tool which is applicable to the environment of China.

3141
Disseminating Cochrane evidence with the leading social media on mobile phones in China

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Background: Since 2014, our centre (CEBCM) has been committed to translating Cochrane review abstracts and plain-language summaries (PLSs) into simplified Chinese (SC), and 51 volunteers (out of 91 trained) are currently active in translation activities. To 13 March 2017, 187 Cochrane review abstracts have been translated (and10 more monthly) and published. Despite the increase in translation, there is a need for wider awareness of the review abstracts as China has a large population with comparatively limited access to the Cochrane reviews.
Methods: Developed in January 2011, WeChat, a social media, is now the leading cross-platform mobile phone application in China. It has been installed in over 94% of smart phones to June 2016 and currently possesses 806 million active users. Based on the communication and agreement with Cochrane, we started to share Cochrane translations via official accounts of CEBCM as well as Specialty Committee of Evidence-Based Medicine under the Chinese Association of Integrative Medicine (CAIM). In each post, we provided an introduction to Cochrane reviews as well as the link to the original text in Cochrane.org.
Results: We started sharing in January 2017 and the sharing became a weekly digest from March 2017. Translations of a variety of Cochrane products, including PLS, podcasts and blogshots, have been shared with WeChat and read by different groups of people. Physicians and researchers can read the latest Cochrane evidence, while teachers and students have a wider opportunity to understand Cochrane reviews, lay people start to know Cochrane and evidence-based medicine, translators learn when translating and are encouraged to spread Cochrane evidence when acknowledged for their translation. Each post averages 400 readings and the number is increasing. Conclusion: WeChat is efficient in disseminating Cochrane messages to increase public awareness. We will continue working on the project under the guidance of Cochrane and China Cochrane Centre. We hope to improve the quality as well as quantity of our dissemination via better and wider cooperation in the future.

Attachments: Fig.1-The first sharing of Cochrane review PLS.jpg, Fig.2-Sharing in WeChat.jpg, Fig.3-Introduction to Cochrane and the example of amount of reading.jpg

3142
Assessing the optimal presentation of how patients value health outcomes (values and preferences): A qualitative user testing

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Background: We conceptualise patient values and preferences as how patients value the relative importance of health outcomes. A transparent and structured approach to communicate this type of evidence remains unavailable.
Objectives: To develop and evaluate the use of the current summary of findings table formats for the presentation of outcome importance (values and preferences) evidence.
Methods: We developed a tabulated presentation of findings and certainty of evidence, based on the existing GRADE Summary of findings table. Following development, the new-SoF table for presenting the outcome importance evidence, was piloted through brainstorming sessions, and presented to a purposeful sample of systematic review authors and guideline developers using a semi-structured interview format. We analysed the data using an inductive content analysis strategy and Morville's Honeycomb model.
Results: The findings from the user testing interviews were largely related to usability and usefulness of the table. Although the table is in general easy to use, some users misunderstood evidence regarding utilities and variability within studies (as opposed to inconsistency about typical values). To address the former we added a visual analogue scale to clarify the evidence presentation. The settings on which users focused were most often the guideline development process, although the participants felt that the table could be used to summarise and/or present evidence, or for clinicians to initiate a conversation with patients about what is most important to them.
Conclusions: Using rigorous methods we developed a user-friendly summary of findings table to present the evidence regarding outcome importance. Subsequent work will explore the additional value of the summary of finding table and possible alternative formats.

Attachments: SoF table testing.pdf

3143

Challenges and inspirations in disseminating clinical evidence on Traditional Chinese Medicine: 10 years' experiences from volunteers

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Background: The Centre for Evidence-Based Chinese Medicine from Beijing University of Chinese Medicine (BUCM) have been training volunteers for 10 years to translate and disseminate clinical trials on Traditional Chinese Medicine (TCM) that were published in Chinese to the Cochrane CENTRAL via Complementary and Alternative Medicine Field with ProCite database software.
Methods: We collected randomised clinical trials on TCM from literature searching among Chinese journals through our recruited and trained volunteers from undergraduates at BUCM who were majored in medical English. We trained them on ProCite use, formatting, and methodology. We assessed their qualification through a pilot work. The eligible volunteers were assigned with certain amount of abstracts according to their time and capacity in the official launch. After submission, we collected individual feedback about issues slowed them down. Challenges: There were issues in the original Chinese publications challenging the translation and dissemination of TCM clinical evidence. 1) In the aspect of methodology, the reporting of randomisation is generally poor and insufficient in abstract. 2) In the English part of bilingual abstract, there were obvious traces of machine translation as they were not grammatically correct. Other issues included diversity in terminology of diseases and prescriptions; Chinese herbal medicines were presented as Pinying but lack in Latin names; the use of Chinese punctuation in the English abstracts. Achievements so far and inspirations: 65 volunteers participated in the project and we submitted 19 918 trial citations and abstracts to the Cochrane CAM field. We continue to improve

the ProCite database entry guidance, so volunteers' training work carried out more and more smoothly year by year. We suggest to train reviewers, researchers and clinicians, both in the methodology and in the translation and writing of English abstracts.

Attachments: 1.jpg, 2.jpg, 3.jpg

3144

Recognising delirium in hospitalised children: A systematic review of risk factors and characteristics of acute paediatric delirium

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Background: While delirium in the adult, and particularly the older adult patient, is well documented, the incidence of delirium among hospitalised children is elusive. Yet retrospectively, up to 30% of children who had been hospitalised recall having hallucinatory experiences during their hospital stay The majority of these were highly disturbing memories with persistent and threatening content (98%). Except in two cases, the location associated with these memories was the paediatric intensive care unit (PICU). Objective: The purpose of this study was to examine the evidence on risk factors and characteristics of acute paediatric delirium. Method: Using the systematic review method within an epidemiological framework of person, time and place, a total of 52 studies were selected for retrieval and 21 (N=2616) were included in this review after assessment for methodological quality using JBI tools validated for this purpose. Findings: There are 5 primary characteristics seen in children experiencing delirium: inattention, agitation, sleep-wake cycle disturbances, impaired orientation and hallucinations, usually visual. Children who were more seriously ill, such as those in PICU and with a high PRISM-II score, and children who were mechanically ventilated were at greater risk for development of delirium. Those with a developmental delay or a pre-existing anxiety disorder were more also prone to delirium. In the two studies that reported the effect of race on development of delirium, 70% and 79% of the children, respectively, were Caucasian. Although delirium symptoms fluctuate, most episodes occurred at night. Boys were slightly, but not significantly, more susceptible than girls. An important finding was that across the 21 included studies, 28.9% of children (N=758) were diagnosed with delirium. Conclusion: Early recognition and management of paediatric delirium may help prevent unnecessary laboratory testing and imaging studies that increase overall hospital cost as well as inflict unnecessary pain and anxiety on children.

3145

Reducing labour and time in creating a systematic review for Japanese rehabilitation nutrition guideline by using artificial intelligence and social networks

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Background: Rehabilitation Nutrition intervention appears to be important in order to increase intervention effect or to prevent iatrogenic sarcopenia We have tried creating a systematic review (SR) for Japanese rehabilitation nutrition guidelines. The problem is to select from a large amount of literature searched which can be a very burdensome for clinicians. Creating a guideline is often done by clinicians who are not familiar with preparing guidelines and SRs. Training is needed.
Objectives: We attempted to resolve these problems by using Web Soft which incorporates artificial intelligence, educating using social network system and reducing the labour.

Methods: We received the results of a comprehensive literature search necessary for artificial intelligence software called Rayyan. In order to reduce the bias and eligibility criteria for the literature, a protocol was created in accordance with the process of the Cochrane Handbook before registration selection by educating in SNS and registered in prospero. The the primary and secondary screening used FaceBook messenger. For the risk of bias evaluation, we used a website with artificial intelligence called Robot Reviewer that evaluates the quality of the paper merely by attaching PDF of RCT to the web.
Results: Rayyan automatically sorted each document by incorporating the results of exhaustive literature search required for SR. Not only essential databases for SR such as MEDLINE, but also corresponded to Japanese such as Ichushi-Web. Systematic reviewers could use the literature selection smoothly with Google translationin the Rayyan website.Selection of 365 literature on cancer rehabilitation was previously unavoidable even if it took more than a month, but this time it was completed in one week. Using the group in the FaceBook, primary and secondary screening was possible on smartphones as well. Robot Reviewer evaluated risk of bias in 10 seconds
Conclusions: Using artificial intelligence software and FaceBook as a platform can greatly reduce the labour and time needed to develop guidelines.

3146

User preferences regarding online tools for systematic review and guideline production: Results from a G-I-N Tech Survey

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[5] Doctor Evidence, USA
[6] The University of South Australia, Australia

Background: There are now over 120 software tools/programs* that can assist in the guideline or systematic review development process. G-I-N Tech are a working group that have been established to investigate the sharing of information from the various electronic tools used during systematic review and guideline development and to provide a forum for members to discuss the best way to use the various tools. However, it is currently unclear what tools are used by G-I-N members, what steps of the guideline development process they are used for, and if there are barriers to their use.
Objectives: To determine what tools are currently being used by guideline developers (including systematic reviewers) and how they are used.
Methods: Data will be collected via a survey using SurveyMonkey during May-July 2017. Demographic data will be collected (such as age, country and which G-I-N organisaiton the participant is from). Questions will then be asked regarding their use of tools to support the systematic review and guideline development process. Likert scales will be used for some questions, whilst a simple response of yes/no/not applicable will be used for others. Additionally, there will be sections where free text/open responses can be provided.
Results: The results of this survey will provide information regarding what online tools are used, what they are used for, and also provide valuable feedback to the SR and guideline tool development community.
Conclusions: The results of this survey will provide a focus for discussing improvements of tools to make them more useful to G-I-N members, as well as aid in the sharing of information between the various tools and platforms. As a forum, the G-I-N Tech working group will use these results facilitate discussions with tool developers and the guideline development community. *123 tools are listed on the SR ToolBox website, http://systematicreviewtools.com/

3147

A best-practice implementation project of the maintenance of totally implantable ports: Lessons from one high-volume centre

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Background: The totally implantable port is a common central venous access device. however, the cost of implantation and maintenance is very expensive. At present, the main problem of the promotion and the use of implantable ports in China is lack of well-trained professional healthcare providers. Furthermore, maintenance of totally implantable ports by nurses is poor and the patients may easily get complications. Based on previous study, the current study enlarged the sample size.
Objectives: This project aimed to reduce the incidence of complications amongst patients with implantable ports, and improve healthcare safety and care process, strictly in compliance with the current evidence-based criteria.
Methods: A baseline audit on maintenance of totally implantable port was undertaken utilising the Joanna Briggs Institute Practical application of Clinical Evidence System programme from 1 March to 31 May 2016 including 120 nurses and 120 patients. An intervention of education, demonstration, clinical practice and assessment was conducted from 1 June to 31 December. A post-implementation re-audit was performed from January first to February 28th 2017. Baseline audit and post-Baseline re–audit of Nurse Knowledge Questionnaire and Patient Questionnaire Notes were performed with complications investigated.
Results: The results for the nine audit criteria for totally implantable port maintenance were as follows: the compliance rate for Criterion 1 from 82.5 to 100% , Criterion 2 from 2.5 to 100%, Criterion 3 from 5.8 to 100%, Criterion 4 from 94 to 100%, Criterion 5 from 77 to 100%, Criterion 6 from 97 to 100%, Criterion 7 from 43 to 100%, Criterion 8 from 18 to 100%, Criterion 9 from 26 to 99.1%.During implementation we found four barriers and took measures to cope address them.
Conclusions: This project achieved a significant improvement in establishing an evidence-based practice regarding maintenance of totally implantable ports. Better sustaining methods should be explored in the future.
[This project was supported by Shanghai Municipal Commmission of Health and Family Planning Foundation(201540352)]

3149

Perceptions and experiences of participant recruitment to trials: A qualitative interview study with trial stakeholders

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Background: Recruitment to randomised-controlled trials (RCTs) is difficult. Poor recruitment can lead to time and budget extensions, potentially producing an underpowered study which fails to answer the research question. In the worst cases RCTs may be abandoned, causing huge waste. Thus, recruitment is considered a priority in trial-methods research.
Objectives: To understand how participant recruitment impacts the day-to-day lives of those charged with the task, we conducted a qualitative study with trial stakeholders. This will help methodologists to understand the on-the-ground challenges of recruitment, enabling them to make more-effective design decisions about future recruitment research to help ensure RCTs recruit to target.
Methods: Purposive and convenience sampling of trial stakeholders from the UK National Health Service, academia and industry. Individuals categorised themselves as ‘designers’; those who design recruitment

methods, or ‘recruiters’; those who implement recruitment strategies. One-to-one interviews were conducted using a semi-structured topic guide either in person or over the telephone, and lasted approximately one hour.
Results: We interviewed 23 individuals with diverse recruitment experiences in roles such as Research Nurse, Clinical Trial Educator, Research Manager and Professor of Health Services. Our sample had 11 ‘recruiters’ and 12 ‘designers’; 19 from the UK, 2 from South Africa, 1 from Canada and 1 from Italy. Framework analysis was used to analyse interview transcripts and themes were identified within 3 broad concepts: 1) Current practice for designing recruitment strategies, highlighting the use of strategies lacking evidence of benefit; 2) What information stakeholders would find useful regarding evidence-based strategies; and, 3) How best to present evidence related to recruitment methods that have been used in RCTs to date.
Conclusions: The results give a clear view of current recruitment practice, which is far from evidence-based. Our findings point to how current evidence can be best presented to inform recruitment decisions as well as highlight what sort of evidence future research should provide.

Poster session 4 Saturday: Evidence implementation and evaluation

4001

Challenges to the implementation of the New Guidelines for Breast Cancer Early Detection in Brazil

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Background:
Background: The new Guideline for early detection of breast cancer is the first Brazilian Ministry of Health Guideline based on Systematic Reviews and applies the GRADE System, establishing new standards for guidelines development in the country. The implementation of evidence-based guidelines is a worldwide challenge and traditional strategies based only on the dissemination of their text are proven to be insufficient to generate changes in current clinical practice.
Objectives: To assess barriers that can impact the implementation of current guidelines and strategies for overcoming them Results and
Conclusions: Although these guidelines are based on good-quality evidence, their recommendations are still counter-hegemonic in the international and national arena, both in the common sense, in the mainstream media, among health professionals, academics and managers, as well as explicit rejected by some medical societies and advocacy groups. A major challenge to adherence to the new Guidelines for Early Detection in Brazil is the current pattern of use of mammographic screening in the country, with screening of young women and short interval between examinations. This harmful practice to the health of the population is reinforced by the dissemination of misinformation, which overestimates the benefits of screening and underestimates or even omit its risks, as well as the practice of defensive medicine. To overcome these barriers, changes related to the regulation of care, financing, and the implementation of the shared decision-making process in primary care are essential. Audit-feedback, academic detailing and incorporation of decision aids are some of the strategies that may facilitate the implementation process of the new guidelines in the country.

4002

Remote development of a localised package of care to support primary healthcare clinicians in Nigeria: A case study

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Background: The Practical Approach to Care Kit, PACK, is a programme designed to equip clinicians to diagnose and manage common adult conditions in primary care. Developed in South Africa by the Knowledge Translation Unit (KTU) and evaluated in several pragmatic trials, it comprises an integrated clinical management guide, a case-based training programme, methods for monitoring and evaluation and health system strengthening. A generic version has been developed for global use. A recent assessment of Nigeria's primary healthcare clinicians showed low clinical competence in diagnosis and treatment of tracer conditions.
Objectives: To localise the PACK programme to the needs of Nigeria's primary healthcare through a remote mentoring programme.
Methods: The KTU mentored an interdisciplinary team of six Nigeria-based doctors and community health practitioners over a period of 6 months through an iterative process of adaptation of the PACK Global Adult guide, checking each recommendation for relevance and alignment with local treatment guidelines. The process involved an introductory workshop and three user-engagement workshops in Nigeria, and a training programme in South Africa.
Results: The development of the PACK Nigeria Adult guide and training materials involved the electronic exchange of each page of the PACK Global Adult guide between the KTU and the Nigeria-based team. Iterations of each page ranged from 3 to 16. We identified and incorporated local priority conditions. The training materials which included a step-by-step manual for Lead/Master Trainers, Facility Trainers and the case-based curriculum, were localised for local priority conditions. The programme is being piloted in 3 states in Nigeria, results of which will inform further improvements that may be applied when nationwide roll-out is required.
Conclusions: This process of localising the PACK Global Adult programme for Nigeria's primary healthcare provided valuable insights and will serve as a model for facilitating remote development of a relevant, integrated policy and evidence-aligned management guide and training programme in other countries with similar needs.

4003
Checking the checkboxes: A review of the appropriateness of performance measures

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Background: Physician reimbursement and healthcare financing is increasingly driven by value-based payment. Physician and system evaluation of quality of care is frequently defined by performance measures. This may improve clinical outcomes if performance measures used are appropriate.Implementation and compliance with inappropriate performance measures can increase use of unnecessary medical services, consequent harms to patients, waste of resources, and decreased patient and physician satisfaction. In the USA,, primary care physicians participating in the Medicare Merit-based Incentive Payment System (MIPS) must choose at least 6 out of 65 outpatient performance measures for which they will be evaluated, including at least one outcome measure.
Objectives: Report on the appropriateness of the 65 primary care performance measures in MIPS for 2017.
Methods: We developed four appropriateness criteria for performance measures (convincing evidence, benefits outweigh harms, adequate specification of population and adequate specification of intervention) using evidence-based principles and experience evaluating performance measures, guidelines and evidence. We evaluated the 65 performance measures in MIPS. Systematic searches of PubMed, relevant organisational guidelines, and DynaMed Plus were used to determine the presence of convincing evidence. Three physician raters with methodologic expertise and subject matter expertise rated all measures and reached consensus for final ratings
Results: Preliminary results (pending complete ratings and consensus) for 65 performance measures:: 21 measures (32%) meet criteria for appropriateness 25 measures (38%) meet criteria for appropriateness with

suggested modifications 19 measures (29%) do not meet criteria for appropriateness
Conclusions: Most MIPS performance measures lack evidence to support their use or specificity for appropriate implementation. Clinicians and administrators can use this systematic approach to identify and implement higher-quality, evidence-based performance measures. This will minimise inappropriate medical resource utilisation.and improve overall clinical care.

4004

Increasingly the quality promotion initiative for physical therapy in Belgium is delivering guidelines and EBM-information to physical therapists.

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Background: In the context of this quality promotion initiative, physical therapists are participating in local peer groups (LOKK's). Information is disseminated through experts, exchange of experience amongst colleagues (peer review) and discussions on how to best apply these guidelines in the clinical practice.
Objectives: Improve the perception, knowledge and skills for applying the guidelines in the clinical practice.
Methods: Physical therapists sign up for a local quality promotion group, who organizes the peer review sessions. Participants take a survey about their competencies related to the topics that will be discussed during the sessions. After the discussions, an evaluation is completed and at the end of the two months period the physical therapist reviews the initial questionnaire again. The results are captured in a database. Local quality promotion groups of 12-40 physical therapists receive details on certain aspects of a guideline or EBM information during a half hour session. Afterwards, there are smaller group conversations among practitioners based on the survey administered before the activity. Participants share their experience, expertise and questions about a specific guideline. At the end of the session, participants summarize the discussion and receive a set of action items to try out in their practice.
Results: A macro analysis of the pre- and post-survey data indicated an increase in competency level, both in terms of knowledge, skill and attitude towards the guidelines.
Conclusions: The methodology that we deployed has shown to contribute to the dissemination and implementation of new guidelines and EBM information. Reference: The dissemination of EBM and guidelines is part of the quality improvement program for physiotherapists in Belgium, as developed by Pro-Q-Kine vzw, Imperiastraat 16a, 1930 Zaventem, Belgium.

Attachments: logo_Pro-Q-Kine-promo fr-nl.jpg

4005

Report on the 'pre' and 'post' peer review questionnaire on 'assessment and treatment of gonarthrosis'

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Background: Prevalence for gonarthrosis rises strongly with age, especially in obese females (+65 yrs: 23%). Assessment and treatment of this group is a challenge for the PT.
Objectives: To evaluate whether peer consultation contributes to enhancement of knowledge, skills and attitude when applying the guideline 'knee arthrosis'.
Methods: In the context of the Belgian Quality Enhancement System, 322 PTs enrolled in peer-review consultations concerning assessment and treatment of knee arthrosis, after explanation by an expert on the 'guideline knee arthrosis'. A pre- and 60 days post- peer review 9-item questionnaire was filled out by the participants. The questions, on which answers were graded by the Likert-scale, dealt with assessment (4

questions), treatment skills and attitude (4 questions) and attitude towards written reports for the prescribing physician.
Results: Macro level analysis showed improvement on all the questioned items, e.g. knowledge, skills and attitude towards the peer review. Differences between 1st and 2nd questionnaire were relevant on the p = 0,01-level.
Conclusions: Organising peer reviews on assessment and treatment of gonarthrosis and, we might add, for other medical problems, is a valuable technique to improve the competencies of PTs.

Attachments: Abstract for Global Evidence Summit congress 2017 KS-1.pdf

4006
The development of nursing guidelines and standardised decision trees. A systematic quality programme for Dutch nursing practice

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Background: The National Professional Standard of Nursing states that nurses should provide professional and compassionate care with respect and confidentiality. Therefore, the Dutch Nurses' Association V&VN has set up a quality programme in which clinical guidelines for caregivers, registered nurses and nurse practitioners have been developed. In addition, the information from these guidelines is standardised and implemented into electronic health records.
Objectives: This quality programme supports the nursing decision-making process in daily practice. The aim is to enhance the quality of nursing care, by reducing unwanted variation in care, guiding nurses in decision making and monitoring the results and outcomes of interventions with nursing sensitive indicators.
Methods: V&VN started a pilot study for wound care by nurses. Clinical nursing guidelines related to wound care were studied by experts. These guidelines were converted into decision trees. Then, standardised nursing information (based on detailed clinical models and SNOMED CT terminology) was integrated into the decision trees. Feasibility aspects of these decision trees were tested in multiple institutions, including hospitals and community care centres.
Results: Decision trees for pressure ulcer, acute wound, oncological ulcer, skin tears, diabetic foot, burns and ulcus cruris are developed leading to improved quality of nursing care and comparable and exchangeable information. In the future, nursing sensitive indicators provide national information about the quality of care, safety and outcomes of nursing interventions.
Conclusions: This nursing quality programme focuses on the development of nursing guidelines and standardised decision-trees and integrating these decision-trees into the electronic health records. Standardised nursing information allows consistent retrieval of clinical information for nursing research, transparency and accountability purposes, developing the body of knowledge, and improves the exchange of nursing information within and across different healthcare sectors and settings. This information provides new insights for the development or revision of guidelines.

Attachments: Image The development of nursing guidelines and standardized decision trees. A systematic quality program for Dutch nursing practice..jpg

4007
Multiple strategy peer-taught evidence-based medicine course in a poor resource setting.

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BACKGROUND: Teaching Evidence Based Medicine (EBM) is becoming a priority in the healthcare process. For undergraduates, it has been proved that integrating multiple strategies in teaching EBM yields better results than a single, short-duration strategy. However, there is a lack of evidence on applying EBM educational interventions in developing countries. In this study, we aim to evaluate the effectiveness of a multiple strategy peer-taught online course in improving EBM awareness and skills among medical students in two developing countries, Syria and Egypt. METHODS: We conducted a prospective study with pre- and post- course assessment of 84 medical students in three universities, using the Berlin questionnaire and a set of self-reported questions which studied the students' EBM knowledge, attitude and competencies. The educational intervention was a peer-taught online course consisting of six sessions (90 min each) presented over six weeks, and integrated with assignments, group discussions, and two workshops. RESULTS: The mean score of pre- and post-course Berlin tests was 3.5 (95% CI: 2.94-4.06) and 5.5 (95% CI: 4.74-6.26) respectively, increasing by 2 marks (95% CI: 1.112-2.888; p-value <0.001), which indicates a statistically significant increase in students' EBM knowledge and skill, similar to a previous expert-taught face to face contact course. Self-reported confidences also increased significantly. However, our course did not have a major effect on students' attitudes toward EBM (1.9-10.8%; p-value: 0.12-0.99). CONCLUSION: In developing countries, multiple strategy peer-taught online courses may be an effective alternative to face to face expert-taught courses, especially in the short term.

4010

Evidence-based decision making: Development of a core curriculum for healthcare professionals and lay people

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Background: The revision of the curriculum of the German Network for Evidence-based Medicine aimed at an inter-professional curriculum to enhance competences in evidence-based decision making (EBDM) in both healthcare professionals and lay people to facilitate informed shared decision making in healthcare.
Objectives: To develop a theory-based core curriculum in ebdm for healthcare professionals and lay people.
Methods: We developed the curriculum based on Kern's Six-Step Approach for curriculum development: (i) Problem identification and general needs assessment involved the conduct of a scoping review on existing curricula. (ii) Targeted needs assessment involved the exploration of experiences with ebdm, learning objectives, topics of interest, preferred course formats, and barriers of the target groups using questionnaires with open-ended questions. We involved students from the fields of medicine, dentistry, nursing, physiotherapy, speech therapy, and occupational therapy. (iii) Goals and objectives were consented and defined by experts through workshops and online conferences.
Results: 19 systematic reviews were included in our scoping review. However, no satisfactorily evaluated curriculum could be identified. 284 students from various fields were surveyed. Student-defined objectives extended our pool of objectives. For consensus-building, 2 workshops and 2 online conferences involving 29 experts were conducted. The experts represented all targeted health professions. The curriculum comprises 6 core modules: 1. Introduction to EBDM 2. literature searching, 3. diagnostic studies, 4. interventional studies, 5. systematic reviews and guidelines, and 6. shared decision making. Consensus on goals and objectives was reached by discussion.
Conclusions: This is the first time such an innovative, multi-professional approach has been undertaken. The

curriculum will now be pilot tested.

4011

Attitudes of guideline developers regarding machine learning and crowd sourcing for health-evidence synthesis

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Background: There is an evolving discussion about the use of advanced technology to aid the completion of systematic reviews, including the use of machine learning and crowd sourcing. One of the key aims of producing high-quality health evidence is to use it to develop guidelines. Therefore guideline developers are key gatekeepers in the acceptance and use of evidence produced using machine-learning and crowd-sourcing. There has not yet been structured research regarding the attitudes of guideline developers regarding these technologies (machine-learning and crowd-sourcing).
Objectives: This paper will describe the attitudes of guideline developers towards the use of machine learning and crowd sourcing in evidence synthesis for health guidelines. It is intended that these data will inform the design of these automation systems as well as future research regarding validity and reliability.
Methods: Semi-structured interviews are being conducted with guideline developers and others involved with guideline development. Interviews are being transcribed and a thematic analysis will be performed using NVivo.
Results: The results of the above-described thematic analysis will be completed in June 2017 and will be presented.
Conclusions: Results of this study will elucidate guideline developers' attitudes towards machine learning and automation. This information will be used to guide the design of future experimentation in the accuracy, reliability, and potential benefits of automation technologies and will contribute to the user-centred design of semi-automated evidence systems for use in guideline development.

4012

Communities generate evidence to inform national advocacy for improved human resources for health in Uganda

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Background: Advocacy for Better Health aims to equip citizens with an enabling environment and systems to effectively advocate for strong action plans to improve health services. This is because the 2020 Government target is for Uganda to transform into a middle-income country (National Development Plan II, 2015) will be achieved if investment is made in keeping the population healthy and productive.
Methods: Citizen participation as an important foundation for change (Parker, B, 2003) has been emphasised to gather data through participatory rural appraisal (Chambers, R., 1997) and inform evidence-based advocacy for recruitment and motivation human resources. Citizens conduct problem ranking during advocacy forums on staffing levels and health worker absenteeism. Citizens prioritised inadequate number of midwives and absenteeism. On triangulation, the health worker to population ratio in Uganda remains at 0.25/1000 which is far below the World Health Organization (WHO) threshold of 2.3/1000 (IntraHealth, 2015). Interventions: Working with IntraHealth, the project advocated for recruitment of critical skilled staff (doctors and midwives) and scale up health workers' motivation strategy to reduce Uganda's Neonatal Mortality Rate of 22/1000 and Maternal Mortality

Ratio of 320/100 000 (World Health Series, 2015).
Results: Government has committed to increase staffing to 80% by 2018 (Health Sector Development Plan, 2015), 10 districts have passed ordinances and revived use of duty rosters to address health worker absenteeism. The better health advocacy debate has been elevated with need to increase health-sector budget allocations from 8% to 10%.
Conclusions: Building a body of evidence from citizens enhances the advocacy agenda. Communities will further monitor government commitments to reduce the Neonatal Mortality Rate and Maternal Mortality Ratio.

Attachments: Global Evidence Summit - Asinguza Allan Peter.pdf

4013
The implementation of clinical practice guidelines: The Tunisian experience

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Background: Clinical practice guidelines (CPG) constitute an important decision-making tool adopted by healthcare professionals.
Objectives: Nowadays, CPG development is a priority in Tunisia to improve healthcare quality and efficiency, and great efforts have been devoted to implementing CPGs in Tunisia.
Methods: The National Instance for Accreditation in healthcare (INASanté) was created by decree in September 2012, one of its main missions is CPGs development. Many initiatives have been taken by INASanté team to prepare the ground for the implementation of CPGs. Regarding the lack of human and material resources at INASanté, the time requested to develop a CPG,an implementation strategic study has been done and it was decided to opt for CPGs adaptation methodology as an alternative to de novo elaboration. A capacity building collaboration with King Saud university has been set up to train INASanté team and relevant stakeholders on CPGs adaptation methodology.
Results: INASanté has signed 26 partnership conventions with scientific and medical associations. Plenty of healthcare professionals gathered their efforts with INASanté team to develop a contextualised draft of CPG's elaboration guideline. As a result of the capacity building collaboration with King Saud University INASanté has started its first CPGs adaptation project on diabetes and pregnacy. Many other adaptation projects are planned for 2018. In addition, INASanté has joined international networks in order to exchange and to benefit from the international experience in the field. At the same time, a policy of conflicts of interests declaration has been implemented.
Conclusions: Considerable work has been done in Tunisia to implement CPGs via INASanté and its partners. INASanté, with its different missions, is on its way to be considered as an important actor in Tunisian healthcare system reform.

4014
Development and assessment of a blended learning module for educating a general audience about Evidence-Based Practice

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Background: The Belgian Red Cross (BRC) aims to scientifically support all its activities through evidence-based practice (EBP). The Centre for Evidence-Based Practice (CEBaP) is concerned with this, but also tries to spread EBP by offering half-day courses in EBP to employees, who are unfamiliar with EBP. The goal of this course is to motivate people to have a critical attitude towards the validity and usefulness of information, to teach them the basics of EBP and to point out the advantages and limitations of evidence-based work.
Objectives: The newly developed course (3 E-learning sessions, taking 1 hour to complete, followed by a 1.5 h contact moment) will be compared to our traditional half-day classical course with relation to attitudes, self-perceived and measured knowledge.
Methods:A blended-learning module was developed and will be launched in May 2017, and will replace our face-to-face classical course. The attitudes, self-perceived and measured knowledge of its users will be compared with participants of the final half-day classical course from January 2017 (n=10). Short questionnaires are taken before and after participation, and analyses are made using a Wilcoxon Log-Rank test at the 95% confidence interval.
Results: The half-day classical course led to an increase in perceived knowledge, as demonstrated by an increased knowledge on formulating a PICO question (median pre 1.5 IQR [1;3.5] vs post 4 [4;5], p=0.009) or recognition of a systematic review (4 [3;5] vs 4[4;5], p=0.02). Also the measured knowledge score increased from 6 [5.25;6] before the course to 8 [8;9] after the course (p=0.01). In contrast, the attitudes of the participants towards EBP was already high and did not change significantly. The results of the participants in the E-learning course will be collected in May 2017, compared to the results of participants in the classical course and will be presented at the Summit.
Conclusions: An EBP course increases the knowledge, but not attitudes of employees of BRC. This study will investigate how a blended-learning module compares to a classical course with respect to participant's change in attitudes to and knowledge of EBP.

4015

What Works Centres – collaboration across health, social care, educational achievement, crime, early intervention, economic growth, ageing better and wellbeing

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Background: In 2013, the UK Government launched the What Works (WW) Network, a national initiative to improve the way government and other organisations create, share and use (or 'generate, transmit and adopt') high-quality evidence for decision making. WW Centres support the principle that good decision making is informed by the best available evidence. If evidence is not available, robust methods should be used to find out what works.
Objectives: To: • describe the WW Network in the UK; • reflect on 'knowledge to action' systems and how intermediary organisations can help bridge research, policy and practice; and, • describe how we collaborate between centres. Description: We will present an overview of the WW Centres in the UK and the collaboration across the network. Each What Works Centre has responsibility for a named area of public policy and has its own specific aims and outputs. Since the creation of the network, we have been working together to identify and realise shared aims. More recently this has included the creation of working groups; each with a specific remit and activities. These focus on priority areas for collaboration and shared learning, such as guidance development and research to practice networks. We will present a summary of these activities and explore how shared learning in diverse areas of practice is of benefit.
Conclusions: Evidence-based decision making is not just for healthcare; many areas of policy can benefit from such an approach and increasingly, guidelines are seen as useful tools in areas such as education and crime.

Principles learnt from the years of evidence-based practice in healthcare can be useful; however, adaptation and flexibility is needed to ensure that outputs are relevant to the intended users and can achieve the intended aims – for example, crime reduction or increased educational achievement. There will be distinct methodological challenges and potentially innovative solutions. Established evidence-based practitioners and users can learn from these innovative approaches.

4016

Cats and dogs – a training example for GRADE

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Background: GRADE is an approach to grading the quality (or certainty) of evidence and strength of recommendations (www.gradeworkinggroup.org). It was developed for assessing evidence on the effectiveness of clinical interventions. However, it is increasingly being used in areas beyond clinical practice (often in areas where randomised-controlled trials are lacking), where systematic reviewers, guideline developers and guideline committees may not be aware of, or familiar with GRADE.
Objectives: To present: • An interactive GRADE 'walked through' example. • Our experience of using this to explain GRADE to systematic reviewers and committees working in areas other than medicine and who are new to GRADE.
Methods: We have recently started to use GRADE assessment in a national guideline programme of public health and social care; this includes systematic reviewers and committee members who are not aware of, or are familiar with GRADE. We developed a slide set and 'walked through' example to explain the core principles of GRADE and how it would work for evidence of effectiveness in areas beyond clinical practice.
Results: Initial approaches to explaining GRADE focused on the technical aspects of assessment – limitations, inconsistency, indirectness, and imprecision. More recently, we have focused on the principle of using GRADE, along with a worked example – can pets improve our health? This is a fictitious example and developed to be easy to understand, whilst showing how GRADE works and particularly, how judgments influence the final assessment. This approach aims to ensure people understand how GRADE works, and to explore how the evidence in their particular context might be assessed – rather than to understand the underlying mechanics of GRADE. Conclusion: GRADE can be challenging to explain to new audiences, and especially in contexts where randomised-controlled trials are sparse. This approach uses a simple example to explore the use of GRADE in areas beyond that of clinical practice, and supports new users of GRADE – systematic reviewers, guideline developers, and committees – to understand and explore its use in their own specific context.

4017

The known knowns and known unknowns: A database of knowledge clusters and knowledge gaps in environmental management

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Background: Policy and practice decisions should be based on the best-available evidence. There is an urgent need to identify which key environmental questions are supported by the available evidence and where are critical knowledge gaps that require attention by the research community. Systematic mapping is a relatively novel method for evidence synthesis that is used to describe the state of knowledge on a specific subject. Systematic maps follow rigorous, objective and transparent processes in order to comprehensively identify and collate all available evidence and minimise bias. Systematic maps can also identify subjects that lack research or are underrepresented within the evidence base (knowledge gaps), highlighting areas where more primary research may be needed. Similarly, systematic mapping can identify subsets of the evidence base where sufficient

evidence exists to allow full systematic reviews to be conducted (knowledge clusters).
Objectives: In this poster we aim to describe knowledge clusters and knowledge gaps in the field of environmental management identified through systematic mapping.
Methods: We searched the official Collaboration for Environmental Evidence (CEE) journal Environmental Evidence (www.environmentalevidencejournal.org) for all CEE-registered systematic maps published up to February 2017. All systematic maps were examined for knowledge clusters by extracting any references to suggested full systematic review topics or questions, and for knowledge gaps by extracting any suggestions for topics needing further research. We collated extracted information into a searchable database.
Results: Our database contains knowledge clusters and knowledge gaps from 13 systematic maps from diverse subject areas relevant to forestry, fisheries and agriculture, biodiversity conservation, international development and human wellbeing.
Conclusions: We highlight the importance of publishing a list of knowledge gaps and knowledge clusters and call for such a list to be continually updated as new syntheses are published. We also highlight the need to consistently identify and report knowledge gaps and clusters in systematic reviews and maps.

4018
Using PICO to establish a framework for a comprehensive clinical guideline

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Background: De novo guideline development is labour intensive, costly and often unnecessarily repetitive. The RAPADAPTE approach reduces these concerns but can be challenging if the foundational guidelines being adapted do not match the framework for the guideline being developed.
Objectives: To expedite guideline adaptation and development by using the PICO elements, to both to clarify the existing recommendations in foundational guidelines and to formulate the precise questions to establish a guideline framework for the new Bahrain Breast Cancer guideline.
Methods: 90 clinical recommendations in the foundational Costa Rican breast cancer guideline were translated into English and expanded by expressing Population and Intervention pairings. Sorting the 90 recommendations by Population/Intervention pairings identified areas for convergence and divergence of recommendations. Mapping of these pairings to DynaMed Plus was used to further model a clinical approach to concept organiSation, and facilitate evidence identification and appraisal for guideline development. Adding Comparators increased clarity and precision for communications across guideline developers to define the scope of the recommendations. Adding Outcomes increased clarity and precision for the focus when evaluating evidence to formulate the recommendations.
Results: The guideline scope was expanded to 125 recommendations. 21 population classifications and 85 intervention classifications were coded and easily sorted in Excel to produce a clinically relevant framework which was used to shape the content and scope of the guideline.
Conclusions: PICO-based organisation of the guideline framework provided precise understandings of the 125 recommendations to be developed, and facilitated identification of direct links to the corresponding sections of DynaMed Plus where comprehensive and critically appraised evidence is available to facilitate guideline development.

4019
Defining appropriateness criteria for performance measures

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Background: Performance measures can have a greater impact than guidelines or evidence syntheses for altering behaviour and decision making in healthcare services. Despite extensive development of critical-appraisal criteria for assessment of evidence of different types, and for assessment of guideline-development methodology, there is little formal development of criteria to assess the quality or appropriateness of performance measures.
Objectives: We developed criteria to evaluate the appropriateness of performance measures.
Methods: We evaluated the reviews of performance measures conducted by the Performance Measurement Committee of the American College of Physicians to identify reasons for not supporting specific performance measures as appropriate for implementation. We adapted experience in applying critical-appraisal criteria on scale for evidence (tens of thousands of instances per year) and recommendations (thousands of instances per year) to develop reproducible criteria for appraisal of performance measures. We appraised performance measures in two domains (diabetes and heart failure) with iterative revisions to the appraisal criteria to develop a stable set of appropriateness criteria. We are validating use of these criteria across the core set of performance measures used in the United States.
Results: The appropriateness criteria for a process measure (a measure of implementation of a process of care as a quality indicator) are: 1. Convincing evidence that action changes clinical outcomes. 2. Desirable consequences outweigh undesirable consequences (including consequences of performance measure implementation). 3. Population adequately specified with appropriate exclusion criteria. 4. Intervention adequately specified including appropriate intervals or frequency. Modified criteria are available for outcome measures and for inverse process measures (a measure of the absence of implementation of a process of care).
Conclusions: Explicit criteria for appropriateness of performance measures can be defined and applied. Such criteria can be used to identify measures with the greatest potential to provide most benefit.

4020
Cochrane Rehabilitation Field: Evidence to rehabilitation and rehabilitation expertise to Cochrane

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Background: Based on an initiative of the European Society of Physical and Rehabilitation Medicine (ESPRM), the idea of a Cochrane Rehabilitation Field was supported by a number of organisations, including the International Society of Physical and Rehabilitation Medicine (ISPRM). After approval by the Cochrane Steering Group, Cochrane Rehabilitation was launched on 16 December 2016. The aim of Cochrane Rehabilitation is to be a bridge between Cochrane and Rehabilitation stakeholders, systematically identifying and spreading evidence, but also improving its quality and quantity production per clinical needs.
Objectives: The objective of this poster is to present the organisational structure of Cochrane Rehabilitation.
Methods: Cochrane Rehabilitation is a network of individuals from all continents. Therefore, a clear and well-structured organisation is required to make Cochrane Rehabilitation function effectively.
Results: Up to now 262 people from 52 countries have expressed their willingness to collaborate. The Figure summarises the proposed organisational solution. The Field Director will be directly responsible for the Knowledge Translation strategy and will be assisted by the Executive Committee. The Field Coordinator will ensure the implementation of a networking strategy, daily planning, organisation and coordination of activities between the Committees (Communication, Education, Methodology, Publication and Rehabilitation Reviews), Units and individual members. The Advisory Board includes key persons from different international stakeholders as well as recognised opinion leaders in rehabilitation.
Conclusions: Cochrane Rehabilitation is working to drive, on one side, evidence and methods developed by

Cochrane to the world of rehabilitation and, on the other, to convey priorities, needs and specificities of rehabilitation to Cochrane.

Attachments: Abstract_CochraneRehab2.pdf

4021

What we're learning about evidence-informed policymaking: Researchers' perspectives on advocating for evidence in Africa

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Background: Evidence-informed policy making (EIPM) is about incorporating research evidence along with other important information in decision making. This requires the research evidence to be summarised, optimally packaged and available at the right time. Over the past five years we have participated in various EIPM engagements, mostly in South Africa, but also in other African countries. Objective: To describe institutional approaches taken by our unit on aiming to influence and engage in policy in Africa around priority health problems.
Methods: We identified four engagements we have participated in that included supporting EIPM as a main goal and evidence advocacy activities, with a minimum duration of two months. These were involvements in a national Ministerial advisory committee; national policy development task team; multi-sectoral technical consultation with 13 African countries; and, components of a sub-national project in two African countries. Drawing on project reports, dialogues, meeting minutes, activities and experiences from these engagements, we conceptualised key lessons we have learned.
Results: Types of policies included individual-level (clinical programmes and services), societal-level (public and population health programmes and services) and health-system arrangements. Evidence advocacy differs depending on the type of policy and type of engagement, and starts with a clear understanding of needs. Policy-making processes and key role-players differ between various types of engagements, and an in-depth understanding these is needed to tailor evidence advocacy approaches. Good relationships and building two-way communication and trust between researchers and policymakers underpins building evidence demand. Researchers need to be willing, responsive and make time to engage. Increasing the currency of research as an essential information source is an important part of advocating for evidence. Conclusion: Strategies for evidence advocacy need to be flexible and fit for purpose. Institutionalisation of EIPM is a long-term process that requires ongoing and inventive evidence advocacy approaches.

4022

Cochrane and World Health Organization "Rehabilitation 2030: A call for action"

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The World Health Organization (WHO) launched in February 2017 "Rehabilitation 2030 - a call for action". This is likely to have a deep impact on health systems in the next few years. Cochrane has approved the new Rehabilitation Field and has been invited by WHO as a relevant stakeholder in this effort. WHO recognises the dramatic changes in health and demographic profiles of populations that are characterising the 21st century. People are living longer, with disabling chronic conditions and disabilities that impact their functioning and well-being. The main goals of WHO are to ensure healthy lives and promote well-being for all at all ages, and to

articulate the importance of promoting healthy life expectancy. Health systems are confronted with these emerging challenges; hence, health policies are placing increased emphasis on services targeted at improving functioning, and not only at decreasing morbidity and mortality. According to WHO, rehabilitation could be an answer to this need. Cochrane's strategy becomes significant in this context, as it is based on the production of high-quality evidence through systematic reviews to inform health decision making. Cochrane Rehabilitation is the appropriate instrument in this endeavour: its main goal is to convey to all rehabilitation professionals the best-available evidence as gathered by high-quality Cochrane systematic reviews, but also to improve the Cochrane methods for evidence synthesis. This will help rehabilitation professionals to make decisions according to the best and most appropriate evidence. An important challenge of Cochrane Rehabilitation in the future is to respond to the WHO "Rehabilitation 2030" call for action.

Attachments: Abstract_CochraneRehab1.pdf

4023

Use of Cochrane Evidence in Mexican clinical practice guidelines

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Background: In Mexico, national clinical practice guidelines (CPGs) are developed by Cenetec, a government agency that collaborates with different health institutions. Guidelines are published in an online master catalog and are available to all health professionals. The elaboration of CPGs involves public and private institutions as well as medical associations and colleges.
Objectives: To describe the use of Cochrane systematic reviews (C-SRs) and GRADE within Mexican CPGs.
Methods: We retrieved all CPGs available in Cenetec's online catalogue during February 2017. We reviewed all references for CSRs and non-Cochrane systematic reviews (NC-SRs). We also identified all grading systems used and screened for use of GRADE.
Results: A total of 374 national CPGs were identified and reviewed. All were created or updated between 2010 and 2016. 40% of CPGs cited at least one C-SR. Overall there were 13 576 citations of which 437 were C-SR. The citations of C-SR ranged from 0 to 17 with an average of 1.17. 56% of CPGs cited NC-SRs. There were multiple grading systems used, with 38% of CPGs using more than one system within the guideline. Only 39 CPGs used GRADE.
Conclusions: There is an underuse of Cochrane systematic reviews in Mexican CPGs. There is wide variability in grading systems and thus in the elaboration of recommendations within CPGs. The use of Cochrane Evidence and GRADE should be actively promoted in Mexican health institutions.

4025

Burden of brain tumours in low- and middle-income countries (LMICs): A systematic review protocol

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Background: Brain tumours comprise a diverse group of neoplasms arising from different cells of the central nervous system. They are the second leading cause of death due to neurologic disease among adults and the second most common neoplasm in children. However, most data on their burden and outcome are derived from developed countries with a paucity of information from low- and middle-income countries.

Objectives: To determine the best available evidence on the incidence and prevalence of brain tumours in low- and middle-income countries. Inclusion criteria: This review will consider hospital and community-based observational studies that include patients with histologically confirmed brain tumours and report on the incidence or prevalence of the condition. Search strategy: An initial limited search of MEDLINE and EMBASE will be undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search using all identified keywords and index terms will then be undertaken across all included databases. Thirdly, the reference list of all identified reports and articles will be searched for additional studies. Methodological quality: Papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using a standardised critical-appraisal instrument. Data extraction: Data will be extracted from papers included in the review using a standardised data extraction tool. The data extracted will include specific details about the populations, study methods and measures of significance to the review objectives, i.e. prevalence and incidence estimates expressed as proportions. Data synthesis: Where possible, prevalence/incidence data will be pooled in statistical meta-analysis using a random effects model after logit transformation.Where statistical pooling is not possible, the findings will be presented in narrative form including tables and figures to aid in data presentation where appropriate.

4026

Using a hospital evidence-based practice center (EPC) to inform nursing policy and practice: assessing impact

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Background: In 2006, our urban academic healthcare system created a hospital Evidence-based Practice Center (EPC) to support the local delivery of high quality, safe and high value patient care. The hospital EPC provides rapid systematic reviews of the scientific literature to guide local policy and practice. In 2014, the hospital EPC's impact on health system decision making was evaluated. Here, we specifically focus on examining the hospital EPC's impact on nursing.
Objectives: Evaluate the impact of a hospital EPC on nursing policy and practice using survey methodology.
Methods: We administered a 40-item electronic questionnaire to nurse stakeholders who had requested a hospital EPC review during fiscal years 2015 and 2016. The questionnaire used 5-point Likert scales to assess report usability and impact, and requestor satisfaction (higher scores reflect greater agreement). Results :Across the two years, nurses requested 27 of 59 reviews (46%) published by the hospital EPC (FY15: n=11, 44%; FY16: n=16, 47%). Of 23 requestors eligible to participate in the survey, 21 responded (91%).Nurses with administrative/managerial responsibilities requested 70% of the reviews; clinical nurse specialists and bedside nurses requested 17% and 9%, respectively. Reviews were used primarily to support clinical program development (n=10, 48%), provide clinical guidance (n=7, 33%), update nursing policies/procedures (n=5, 24%) and develop training and curricula (n=5, 24%). 19% (n=4) informed resource allocation decisions. 10% (n=2) informed research proposals. Requestors were satisfied with the hospital EPC reviews overall (mean: 4.7). 95-100% of respondents strongly agreed/agreed that the reviews concisely presented information (mean: 4.8), were easy to request (mean: 4.7), answered the questions posed (mean: 4.7), and were easy to understand (mean: 4.7). 95% indicated they were likely to request a future review.
Conclusions: Nurses at all organizational levels use the services of a hospital EPC when available to inform nursing policy and practice, and are highly satisfied with the process.

4027

Why disguise adverse events?

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Background: Secukinumab was approved to treat plaque psoriasis based on two phase III trials (ERASURE and FIXTURE). These resulted in one publication supporting the drug efficacy when compared to both placebo and another biologic drug. However, the manuscript does not detail the adverse events in the cardiovascular system, although higher cardiovascular risk has been reported in these patients.
Objectives: To assess the incidence of serious cardiovascular adverse events (SCVAE) and hypertension in secukinumab versus placebo groups in ERASURE and FIXTURE.
Methods: The data tables of the published article and supplementary appendix were analysed to look for SCVAE, including hypertension, in the secukinumab and placebo groups, during the 52-week treatment period.
Results: The data tables and supplementary appendices were analysed. All the events in the secukinumab group were analysed, independently of the dose. Statistical analyses were made using OpenEpi. In the ERASURE, 15 SCVAE (2,1%) were described in the secukinumab group as: 2 unstable angina, 2 cardiac failure, 2 coronary artery disease, 1 arrhythmia, 1 myocardial infarction, 1 carotid artery dissection, 1 ischemic stroke, 1 cerebrovascular accident, 1 aortic aneurysm, 1 aortic thrombosis, 1 hypertension and 1 hypertensive crisis. In the placebo group, there was no SCVAE (p= 0.014). In the FIXTURE, 10 SCVAE were described in the secukinumab group as: 1 angina pectoris, 1 angina unstable, 1 arteriosclerosis coronary, 1 myocardial infarction, 1 palpitations, 2 hypertensive crisis, cerebrovascular accident, 1 arterial occlusive disease, and 1 peripheral arterial occlusive. In the placebo group, again, there was no SCVAE (p= 0.049). Hypertension was more incident with secukinumab than with placebo in the ERASURE (5.9% vs. 1.2%; p=0.006) and in the FIXTURE (4.48% vs. 1.22%;p= 0.006).
Conclusions: The pivotal secukinumab studies in psoriasis did not address clearly the higher incidence of SCVAE and hypertension.This is a problem, since the articles were written by medical writers paid by pharmaceutical industry, which likely influenced the concealed way adverse events were described.

4028
Anti-TNF pivotal studies: Psoriatic patients' nebulous data

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Background: Health systems' guidelines and dermatology associations advise that the systemic drug treatment for moderate to severe psoriasis should be initiated with synthetic immunosuppressive or immunomodulatory drugs such as methotrexate, cyclosporine and acitretin. The Brazilian Ministry of Health recommends methotrexate as the first choice. Therefore, novel drugs for psoriasis should ideally be studied in a population that did not respond to this treatment alternative.
Objectives: To investigate the profile of patients enrolled in pivotal anti-TNF (infliximab, adalimumab and etanercept) phase III, randomised-controlled trials regarding the use of previous drugs, especially methotrexate.
Methods: Revision of all published data of three pivotal studies (1 with infliximab, 1 with adalimumab and 1 with etanercept) evaluating the treatment of plaque psoriasis in adults.
Results: Forty three per cent of patients included in the infliximab study had received methotrexate previously to study entry. This information is not available in the adalimumab study, in which a 'non-biological systemic treatment' group was created to include all synthetic immunosuppressive or immunomodulatory drugs used; and 22, 7% of all patients where in this category. In the etanercept study, the information is even less clear. Patients using systemic drugs or phototherapy were grouped in the same category, with 25% of patients entering the study without using any of these as previous therapy. Efficacy was not assessed according to previous use of systemic treatment.
Conclusions: Pivotal studies supporting the commercialisation approval of anti-TNFs (infliximab, adalimumab and etanercept) for psoriasis treatment included patients who did not use prior recommended systemic medications, which impairs the translation of efficacy results to real-life patients. The efficacy of anti-TNFs in these real life patients may be less relevant than demonstrated in the studies, since the results were influenced by

data from patients who were naive of the usual systemic treatments.

4029

Quality of Brazilian Ministry of Health clinical practice guidelines: How can we improve?

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Background: In recent years, the Brazilian Ministry of Health (MoH) has published increasingly national clinical practice guidelines, called clinical protocols and therapeutic guidelines (PCDT) and has invested in improving greater quality and reliability in its elaborations. Recently, 3 updates drafts have been submitted for public consultation and hereinafter they will be incorporated to guarantee the best healthcare in Brazilian context and with local resources available.
Objectives: To evaluate the methodological rigour and transparency of more recents PCDT drafts.
Methods: We intentionally selected three new PCDT's drafts to be evaluated by two trained and independently reviewers using AGREE II instrument. Items with a score difference ≥ 2 points were discussed and resolved through consensus. Discrepancies were resolved by consensus between the 3 reviewers. A third reviewer was involved when needed. Overall CPG quality was classified as high, moderate and low with A to C grading (Figure 1).
Results: The three PCDT drafts and AGREE II scores are described in Table 1. All PCDT drafts scored lower than <60% in the third domain. Two of them (both about Cystic Fibrosis) showed how were conducted the literature searches to the updated, but there was insufficient information about all others items; the other did not mention even search strategy. None of the documents presented a score higher than 60% in any domain - except 'Pre-Exposure Prophylaxis against HIV' whose score in domain 1 was 61%. Conclusion: Despites the changes of the Brazilian Ministry of Health orientation, the 3 PCDT drafts still presented a low quality score, including in domain 3. This study shows that to improve future PCDTs, Brazilian government should focus in rigor of development, to ensure recommendations with a high quality and credibility, although all domains have presented low scores. We acknowledge MoH's efforts to develop high-quality PCDTs and suggest the adoption of a valid instrument, as AGREE II, to assist the development of these valuable documents.

Attachments: Figure 1 (2).tif, Table 1 sheila.pdf

4030

Quality of the reporting of Brazilian Ministry of Health updated clinical practice guidelines (CPGU) versions: Applying checkUP

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Background: The number of Brazilian clinical practice guidelines (CPG) is increasing since the creation of National Committee for Health Technology Incorporation (CONITEC), in December 2011. Recently many Brazilian Ministry of Health (MoH) guidelines have been updated and ddraft versions have been submitted for public consultation.The article CheckUp, published on Jan 2017, brought new information to the guideline evaluation field.
Objectives: To evaluate the quality of reporting of Brazilian CPGUs. As this was first time that CheckUp was applied to Brazilian guidelines, we also discussed its usability.
Methods: Updated version of 2 Brazilian MoH guidelines that were under public consultation were selected: CPGU1 Cystic Fibrosis (CF) Pancreatic Insufficiency and CPGU2 CF Pulmonary Manifestations. Two reviewers

independently answered CheckUp 16 items and discussed answers in teleconferences. As proposed by CheckUp, each item was answered as Yes, No, Unclear and Not Applicable.
Results: All 16 items were considered applicable for 2 CPGUs. Eleven items were answered as NO for both CPGUs (Table 1). Some of those items, are related to methodology, such as items 11 to 13, which are considered of extreme importance for the quality of CPGs. The lack of this information in the CPGU may compromise its credibility. The same for items 8 and 9, which also were answered as NO. Other items related to clarity of information, such as 3 to 5, and 15 to 16, were also answered as NO, considered as relevant to facilitate the understanting of the users of the guides. Answers from 2 reviewers were the same for majority of items, except for items 1 and 2 (table 1). Reviewers considered those items straightforward, but the level of knowledge about MoH update process influenced answers.
Conclusions: Results show huge opportunity to improve draft versions of Brazilian MoH CPGUs with the adoption of CheckUp. Changes related to methodology are essential, even if they are complex to implement. Other simple changes related to clarity, e.g. adoption of a label for recommendations, could represent important improvement, and facilitate the understanding of guideline users.

Attachments: Brazilian MoH updated guidelines.pdf

4031
Implementation of Cochrane Brazil Rio de Janeiro - the first Affiliate Centre of Cochrane Brazil Network

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Background: Cochrane have decided to implement networks in large countries around the world and Brazil was the first country to run this new project. Five Affiliate Centres (AC) were created to cover the country's territory.
Objectives: To report our experience in implementing the first AC ever.
Methods: Our AC has a staff of 5 physicians. We've developed an action plan intending to organise steps which were split into three goals: 1.To promote Cochrane and its work. 2.To support and develop the community of Cochrane members in the country, building capacity for review production. 3.To disseminate Cochrane Reviews locally.
Results: According to the goals cited above: Goal 1. We've announced the launching of the AC extensively on June 2016 by means of e-mail to regional societies of medical specialties, local government health departments, and hospitals, including notes in newspapers. We organised an Evidence-based Medicine (EBM) Symposium on October 2016, with more than 200 participants. Goal 2. We intend to promote 2 local Systematic Reviews Workshops/year. The first is scheduled for 28 April 2017 and the second for October 2017. We've created a discipline and an academic league of EBM at Petrópolis Medical School addressed to undergraduates with the purpose of disseminating EBM and preparing future candidates for Cochrane members. We invited new authors to collaborate with our 4 ongoing SR. Goal 3. We've started to disseminate the results of about 20 Cochrane SR translating them into Portuguese. We intend to translate at least 3 SR/month. We are also translating the web blog 'Students for Best Evidence'. We intend to stimulate discussions in local community representative organs to encourage new consumers to collaborate with the Cochrane groups. We're working to establish a partnership with media channels to promote our activities, spreading the results of Cochrane SR to the local audience.
Conclusions: Cochrane Brazil and this innovative network are playing an important role in disseminating Cochrane evidence across our country. Our results suggest that this initiative is effective and could transform healthcare policies in Brazil.

4032
Actionable principles for the implementation of the Practical Approach to Care Kit (PACK) programme for global adult primary healthcare

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Background: The Knowledge Translation Unit (KTU), based in the University of Cape Town Lung Institute, has spent the past 16 years developing, implementing and evaluating health systems interventions in primary care settings in South Africa and other low- and middle-income country settings. The Practical Approach to Care Kit (PACK) is a strategy comprising 4 pillars that support the delivery of primary care: 1) a clinical guide, 2) a training strategy, 3) a health systems strengthening intervention and 4) a monitoring and evaluation component. This programme is complex and requires that the KTU is able to coherently explain it in order to enhance its implementability within local health systems.
Objectives: The KTU explored a detailed rationale for the PACK programme development, localisation and implementation processes. Examining the core principles which drive the programme as well as their actionable applications aimed to provide clarity and assist in explaining the programme.
Methods: We undertook to reflect on practical development and implementation experience over a period of 16 years, through a process of review, team workshops and high level leadership meetings, and created a list of principles that define the rationale behind the programme.
Results: A list of 16 core principles emerged. The first area of focus overlapped across the guide and training pillars and the other related to the health systems strengthening pillar.
Conclusions: The KTU can maintain the integrity of the PACK programme by using the core principles to convey the approach that PACK takes and why it is different to other programmes. These findings will be used and disseminated by publication in a journal article, included in implementation processes, updating toolkits as part of mentorship packages, and an design of an infographic conveying the message in a simple way to guide localisers, trainers and implementers, end-users and implementation scientists.

4033

A linked evidence synthesis evaluating mental health interventions for children with long-term conditions: Communicating implications for policy and practice

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Background: We have recently completed a project which involved two linked systematic reviews and an overarching synthesis evaluating the effectiveness and experiences of mental health interventions for children and young people (CYP) with long-term physical conditions.
Objectives: To work with evidence end-users to i) highlight implications for future intervention development and implementation; and, ii) facilitate communication to key target audiences.
Methods: A range of tools were used to help communicate co-created key messages from the systematic reviews and promote practice change including i) a line of argument diagram summarising findings from the meta-ethnography; ii) an overarching synthesis bringing together the findings from the reviews of effectiveness and experience; iii) a podcast incorporating the voices of evidence end-users; iv) plain language summaries for incorporation in newsletters;-and, iv) digital summaries of the findings using a variety of formats.
Results: Evidence end-users welcomed the opportunity to engage in the production of a variety of dissemination tools. A project advisory group including young people and parents co-produced podcasts and summaries of the research. A range of consultation events with end-users allowed us to highlight implications in the meta-ethnography and overarching synthesis. Early indications are that the methods used have improved the

communication of useful and relevant messages to those most able to ensure that our review findings make a difference to CYP with long term physical conditions and mental ill health.
Conclusions: Our syntheses identified a number of implications for future intervention development and implementation. Involving evidence end-users in the interpretation of findings and the production of dissemination tools facilitated communication of key messages.

4034
Identifying ways of enhancing effective evidence use in local public-health decision making

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Background: Cultures and structures of public-health decision making are shifting towards greater devolution and localism. As generators and synthesisers of evidence we need to respond to these changes if we are to continue to support public-health decision makers to make informed and judicious evidence-based choices. This study examines evidence use within recently restructured local public-health decision-making structures in England, although the challenges described have wide applicability.
Objectives: The overarching aim is to critically examine whether our own research outputs are fit for purpose in supporting decision making in new public-health structures (specifically local authorities as the municipal government is now leading local public health). We aim to identify areas where research evidence could make a greater contribution and the barriers to this taking place.
Methods: This research took on an iterative design and we present findings from: (i) a systematic scoping review of the literature of local public health evidence use patterns in England; (ii) documentary analyses of local strategies; (iii) qualitative interviews and fieldwork with public health officials in local authorities.
Results: Our scoping review revealed three clear trends in evidence use: (i) the primacy of local evidence; (ii) an important role for local experts; and, (iii) high value placed on local evaluation evidence of varying methodological rigour. Contrary to some of the existing literature suggesting that evidence use is sparse, documentary analyses revealed a complex and diverse set of evidence-use patterns, and we present typologies of evidence use that emerged. Finally, our qualitative interviews revealed some of challenges to effective evidence use, and areas where there was greater potential for evidence to make a contribution in the commissioning process.
Conclusions: In addition to identifying ways in which evidence can be more effectively implemented, an important contribution of this study is to refute some of the literature that adopts a 'deficit model' approach in attempting to understand local evidence-use patterns.

4035
Implementing a model for improving integrated primary healthcare planning and performance: An effectiveness evaluation of DIVA in Kaduna, Nigeria

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Background: To ensure improved performance of primary healthcare (PHC) interventions, Nigeria initiated PHC Reviews in 2011. The reviews are facilitated quarterly evaluations of PHC performance with evidence-based operational planning of interventions by local government (LG) PHC managers using routine data.
Methods: PHC reviews employ a 4-step improvement framework: Diagnose-Intervene-Verify-Adjust (DIVA). 'Diagnose' identifies constraints to effective coverage (Figure 1). 'Intervene' develops/implements action plans addressing constraints. 'Verify/Adjust' monitor performance and revise plans. We evaluated effectiveness of DIVA

in improving PHC bottlenecks in Kaduna, 2013-2016. Kaduna state conducts annual reviews involving all 23 LGs since 2013. The reviews focus on determinants for availability of commodities; human resources; geographical accessibility; initial utilisation; continuous utilisation; and quality of four PHC interventions (Immunisation, integrated management of childhood illnesses, antenatal care, and skilled birth attendance). Our findings are analysed and presented on charts (pie, bar, Pareto and run-charts). Results/Discussion: 183 bottlenecks were identified by LG teams across all interventions in 2013. 41% of bottlenecks relate to human resources. Geographical access and availability of commodities ranked least (Figures 2 and 3). Of 1562 activities planned to address bottlenecks in the state, 568 (36%) were completely implemented. Availability of commodities was the most improved determinant albeit among the least constrained; probably indicating skewed implementation of operational plans (Figure 4). Effect of DIVA on performance indicators varied across interventions. While indicators for interventions with strong donor support (malaria and immunisation) improved, less supported Antenatal Care slightly declined, suggesting skewed implementation towards donor interests (Figures 5-7). Conclusion: Our study demonstrates that bottom-up approach to PHC planning using the DIVA model can potentially improve performance in decentralised sub-Saharan African health systems. However, effective implementation requires some central oversight.

Attachments: Figure 1.pdf, Figure 2.pdf, Figure 3.pdf, Figure 4.pdf, Figure 5.pdf, Figure 6.pdf, Figure 7.pdf

4036

Moving knowledge into practice: Evaluating cross-cultural applicability of the Promoting Action on Research Implementation in Health Service (PARIHS) framework

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Background: The implementation of evidence-based knowledge into practice, is an area of research and practice that has been evolving over the past few decades as the production of evidence-based innovations and the need for effective implementation increases. Knowledge implementation is a complex process, with many frameworks, models and theories to guide it. Yet there is a gap looking at the cross cultural utility of such frameworks.
Objectives: To explore the appropriateness and utility of the PARIHS framework in the cultural translation and adaptation of an evidence-based clinical practice guideline into clinical practice in the healthcare system in Malta. To identify the challenges and barriers to successful cultural translation and implementation to inform future cross-cultural knowledge translation programmes.
Methods: Embedded single case, case study. Data collection was facilitated using focus groups with multidisciplinary healthcare professionals, semi structured interviews, non-participant observation of two guideline development groups. Data were analysed both inductively and deductively using Framework Analysis. Guideline development was based on NICE methodology.
Results: Findings indicate that the components of the PARIHS framework of evidence, context and facilitation are useful to guide the cultural translation and adaptation of an evidence-based clinical practice guideline. Challenges and barriers to successful translation and potential implementation were identified; the influence of politics, culture and context, resources; human and financial and stakeholder involvement. Conclusion : The PARIHS framework is a useful tool to guide the cultural translation and adaptation of an evidence-based clinical practice guideline. The study added important expansion of categories to the PARIHS framework; need for further inclusion of culture; definition of what context means within the framework; the role of the patient; inclusion of politics as a sub element of context; importance of resources.

4037

Barriers and facilitators to postnatal care services utilisation in low- and middle-income countries: A Cochrane/EPOC systematic review

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Background: The first hours and weeks of life are the most critical for neonatal survival, and the most important time for recognising illnesses and timely care seeking, yet postnatal care utilisation continues to have the lowest coverage of interventions on the continuum of maternal and child care. There is a need to evaluate the current evidence on facilitators and barriers to postnatal care utilisation in low- and middle-income countries in order to design and improve health programmes. The objective of this review is to systematically assess reported barriers to postnatal care utilisation by mothers/caregivers/healthcare users and create a Cochrane/EPOC study to do so.
Methods: This review (currently ongoing, but expected to be completed before September) will identify studies from 1970 to the present with published abstracts in English, Spanish, French and Portuguese. Databases include MEDLINE (Pubmed), CINAHL, EMBASE and Cochrane, as well as ancestry search. Study selection criteria include the research setting and study design. Our primary outcome is reported facilitators and barriers to postnatal care utilisation. Two independent researchers are conducting the screening, data abstraction and scientific quality assessment, using standardised extraction forms. Where feasible, results are stratified by countries' income level or geographic region.
Results: Over 300 articles were screened for inclusion; the final numbers and results will be presented in September. This analysis fills the gap between the maternal and pediatric reviews that have been previously conducted.
Conclusions: Our review will inform health policy programmes by identifying the most common facilitators and barriers to postnatal care utilisation. This research will highlight how programmes can improve access to postnatal care utilisation in low- and middle-income countries to advance sustainable gains in global maternal and neonatal health. It will also inform how to carry out a mixed-methods systematic review and collaborate with Cochrane and the EPOC group.

4038

An investigation into public opinion of embedded rooftop photovoltaic systems in Stellenbosch to interrogate policy effectiveness

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Background: The Stellenbosch Municipality has released the Guidelines for Small Scale Embedded Generation in Stellenbosch Municipality 2015/2016 that embedded a Feed in Tariff for small (residential) scale solar PV system owners to connect their solar PV systems to the municipal grid network and sell their excess electricity generated back to the grid (Stellenbosch Municipality). The uptake of embedded solar PV systems was limited before the release of the policy and the Centre for Renewable and Sustainable Energy Studies (CRSES), who played a significant role in the development of the policy, hoping that it will incentivise residents to invest in solar PV systems, thus further opening the market for the technology. Market research involving local Stellenbosch residents, to determine their response to the new policy and FiT has, however, not been done.
Objectives: This study aims take the first steps towards generating evidence to evaluate the potential effectiveness of the policy and feed in tariff in achieving the CRSES's aim to help open the market for small-scale embedded solar PV technology by conducting qualitative research into participants' opinions on the policy and to identify any the social and policy barriers to the uptake of embedded solar photovoltaic generation at residential scale in Stellenbosch.
Methods: Qualitative research in the form of a focus group and three interviews with key policy makers to determine the residents' opinions and expectations. The results are analysed from a perspective of complexity and triangulated with broader theory on sustainable development and complexity theory.
Results: There is a misalignment of expectations and goals of residents, policy makers and external organisations such as CRSES

Conclusions: This misalignment is due to a lack of research and is a barrier to uptake of solar PV systems. Relations between policy makers and residents are negatively affected. More inclusive and engaging research/data gathering is required to generate relevant evidence that captures the relevant complexity in order to better inform policy makers' effective decision making for sustainable development.

4039

Falls prevention strategies among acute internal medicine unit inpatients in a university hospital: A best-practice implementation project

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Background: Falls are a challenge for professionals and healthcare services as they may result in high-impact outcomes for patients, such as functional decline, increase in length of hospital stay, increase in the cost of healthcare services, and death. In an attempt to promote safe care, the WHO launched the World Alliance for Patient Safety that encourages the adoption of best practices to reduce adverse events in healthcare services.
Objectives: The main objective of this project was to reduce the incidence and damage from falls that occur in the acute Internal Medicine Unit in a public teaching hospital in São Paulo, Brazil.
Methods: The project used the Joanna Briggs Institute's Practical Application of Clinical Evidence System (PACES) and Getting Research into Practice (GRiP) audit tool for promoting change in health practice. A baseline audit was conducted measuring eight best-practice recommendations, followed by the implementation of target strategies and follow-up audit.
Results: The results of the baseline audit identified large gaps between current practice and overall performance with best practice. The GRIP results showed that strategies including an education package to patients, families and nursing team, and falls risk assessment with an accurate tool were suitable. The follow-up audit cycle was pleasing to review as all the best-practice audit criteria showed an improvement as an aggregated result. The incidence of falls in Internal Medicine Unit was reduced in the months after project started, however, future audits are required to sustain the improvements.
Conclusions: The project used the audit strategy to translate evidence into practice. Some of the measured criteria improved to moderate-high compliance with best practice. The results showed that implementation of evidence-based practice was possible and led to an improvement of falls prevention. Future audits are required to sustain the improvements.

4040

The triple C (consultation, collaboration and consolidation) model - a way forward to sustainability of evidence into practice

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Background: To date there are many theories, models and frameworks that have been developed and used in implementation science to translate evidence into practice with various successes. Sustainability of the change into practice has been a major issue to the success of some of the existing implementation strategies. The challenges of scaling up and sustaining evidence supported interventions have recently been the attention of funders, leaders in health and researchers.
Objectives: To describe an implementation of evidence into practice model that incorporates three components namely consultation, collaboration and consolidation that aims at ensuring sustainability of evidence into practice.
Methods:A multi-method approach was used to develop the proposed model: 1) literature review addressing key

recommendations to support sustainability of evidence into practice; and, 2) analysis of research, practice development and quality improvement projects.
Results: Analysis of the literature and previous quality improvement projects indicated that a number of key factors appear to play a role in successful and sustainable implementation process. A three stage model is therefore developed and named 'the triple C model' (Figure 1). It represents the relationship of these factors. It is based on three key elements that are in a dynamic and mutual relationship. The three elements are consultation, collaboration and consolidation. The proposition is that for implementation of evidence to be successful and sustainable, there needs to be clarity around key issues contributing to the research question through consultation of key stakeholders. This is followed by the collaboration stage where key experts are recruited to form a targeted action plan. The third element focuses on the consolidation stage and it involves creating a supportive and robust infrastructure within the healthcare organisation to ensure the intervention is business as usual.
Conclusions:A successful model of a sustainable implementation of evidence into practice was developed and tested within a large primary healthcare organisation.

Attachments: Figure 1 the triple c model.pdf

4041
Empirical assessment of the validity of non-randomised studies in social sciences: Systematic review

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Background: Randomised and non-randomised studies of the same intervention may produce different impact quantities due to the methods used to determine causality and the samples included in estimation of the treatment effect. Researchers in social sciences and public health have conducted a large number of internal replication studies in order to test the validity of non-randomised approaches. These studies compare randomised treatment estimates with estimates from non-randomised comparisons.
Objectives: To compare impact quantities estimated in randomised field trials and non-randomised replication studies, and quantify differences according to approaches used.
Methods: We conducted a systematic review of non-experimental internal replication studies of randomised field trials in the social science and public health. We will assess bias and explore correlations between effect sizes and study characteristics.
Results: Surveys of internal replication studies are already available in labour economics (1) psychology (2) international development (3) and education (Wong et al 2016). We update these studies using systematic methods of data collection and meta-analysis to provide new evidence on impact estimates from non-experimental approaches.
Conclusions: The study appraises common sources of bias in non-randomised studies in social sciences and public health, and attempts to quantify deviations from unbiased treatment effects arising from different methodological sources. References 1) Glazerman, 2004. 2) Cook et al., 2008. 3) Hansen et al., 2011.

4042
Using a problem-based learning method for teaching evidence-based medicine in China: A systematic review of randomized controlled trials

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Background: The 'Problem-based learning' (PBL) teaching mode has been widely used in various disciplines of

medical education. Evidence-based medicine (EBM) is a course concerning methodology and being more and more popular in medical students in China.
Objectives: This study aims to systematically retrieve and synthesise existing research evidence to investigate the effect and the students' satisfactory of applying PBL in teaching EBM compared to Lecture-based learning (LBL).
Methods: Five electronic databases were searched to include randomised-controlled trials (RCT) which compared the effect of PBL and LBL method in teaching EBM, methodological quality of included trials was assessed using the Cochrane risk-of-bias assessment method. Revman 5.3 software was used for data analyses. Risk ratio (RR) with a 95% confidence interval (CI) and mean difference (MD) with a 95% CI were used as effect measure. Meta-analysis was to be used if sufficient trials without obvious clinical or statistical heterogeneity were available.
Results: Six RCTs with potential high risk of performance bias were included. Three trials showed significant improvement of examination scores after PBL teaching compared to LBL (MD varied from 9.14 to 20.20), and one trial reported the opposite results (MD=-2.00, 95%CI -3.98 to -0.02, 155 students), due to the obvious statistical heterogeneity (I2=98%), meta-analysis could not be done for this outcome (Figure 1).Regarding to students' satisfactory for the teaching effect, meta-analysis with three trials (involved 285 students) showed PBL may help to stimulate interest in learning (RR=1.37, 95%CI 1.07-1.74, I2=68%), improve language skills (RR=1.37, 95%CI 1.16-1.62, I2=0%), ability to obtain information (RR=1.31, 95%CI 1.07-1.60, I2=56%) and analytical skills to solve problems (RR=1.32, 95%CI 1.03-1.69, I2=55%), etc.(Figure 2)
Conclusions: According to our findings, currently low-quality evidence showed PBL may be more appropriate to be used in teaching EBM to help medical students acquiring the research skills and applying the EBM knowledge in clinical practice.

Attachments: Figure 1.tif, Figure 2.tif

4043
On the overlap and contrasts between ICHOM, assessment outcomes and quality indicators

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Background: The Dutch National Health Care Institute (NHCI) assesses evidence on the effectiveness of interventions for the purpose of reimbursement decisions. It also hosts the national register of guidelines containing medical guidelines together with their relevant quality indicators. The choice of which quality indicators to register in connection to a guideline is based on consensus between representatives of patients, caregivers and healthcare insurance companies.
Objectives: This study aimed at researching a possible overlap between an intervention's health outcomes as assessed in the context of reimbursement; the related outcomes for the targeted disease as published by ICHOM (www.ichom.org); and, the quality indicators as mentioned in the relevant guidelines. If an overlap could be established between these three resources this may offer future possibilities for synchronising activities between these different domains.
Methods: We searched for subjects that were described in all three resources and ended up with (interventions in the) domains of lung cancer, spinal hernia (lower back pain), and stroke (cerebrovascular accident).
Results: This initial inventory showed the biggest overlap between the reimbursement assessments and the outcome indicators in ICHOM that serve to increase the transparency of quality of care. The guidelines in the register seem to focus far less on outcome indicators and have many more indicators that relate to the process or structure, such as which types of treatments a care-provider carries out, which disciplines are involved, volume-indicators, waiting times, completeness of registration, etc. Discussion: This inventory, although preliminary, does give rise to the question 'To what extent is it possible – and desirable – to encourage overlap? and may contribute to the discussion about structure and process indicators no longer being needed if a broad basis of support exists for flawless outcome indicators.

4044

Developing and integrating evidence maps into public-health decision making

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Background: Policy makers in public health are often interested in broad questions such as “what are effective interventions for promoting mental health?” Although well-developed for narrowly-focused questions, the methods of systematic reviews and meta-analyses are inappropriate for broad questions. Thus, we have chosen the method of evidence mapping to support an evidence-informed decision-making process.
Objectives: This presentation will describe the methodological challenges and solutions with developing an evidence map and integrating it into evidence-informed decision-making process.
Methods: We started by calibrating the answerable questions on the basis of a scoping review, which resulted in the formulation of a searchable question. Based on the final search strategy, we identified 6368 potentially relevant studies. After the exclusion of duplicates, dually-reviewed abstracts and full-texts, 94 studies remained for data extraction. Through coordinating with the client, we decided which data are relevant for decision-making. Then we grouped the identified interventions into categories and reported relevant data for each category (e.g. kind of intervention, study design, number of participants, outcomes). In an evidence to decision-making workshop, the client selected promising categories of interventions. For these selected interventions, we extracted further data relevant for choosing and implementing effective mental health promoting interventions.
Results: We identified a promising body of evidence for decision-making (more than half of the studies are RCTs).
Conclusions: Building the evidence map for positive mental health interventions and integrating it into an evidence-informed decision-making process was demanding. As evidence maps aim to give an overview of a broad area of interventions and outcomes, there was an overwhelming amount of literature to deal with. To use resources effectively and develop a useful body of evidence, we recommend close involvement of the client at the critical steps of the evidence mapping process, mainly to define and clarify both terminology and criteria for study selection and implementation.

4045

Using FASD prevalence rates to inform prevention efforts

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Background: South Africa has the highest reported prevalence of Foetal Alcohol Spectrum Disorder (FASD) in the world. The scarcity of resources necessitates careful selection of intervention sites to maximise impact. This presentation gives an overview of how FASD prevalence studies have been used to select intervention sites at different projects. There are multiple clinics at most project sites and an equitable means of intervention site selection is required.
Objectives: To give an overview of the use of FASD prevalence rates as selection tool for for intervention intervention sites. This presentation will also discuss the strengths and weaknesses of this approach.
Methods: This presentation will look at this method as it was used at two project sites. School-based FASD prevalence studies are conducted to determine the rates of FASD among Grade 1 school children in a given area. Using these figures, areas with the highest prevalence were identified and singled out for intervention based on the percentage of Grade 1 learners affected in the nearest school. The prevalence rates were not statistically compared. Suitable clinics in these areas were then identified as sites for intervention.
Results:FASD prevalence rates per school varied greatly and it was possible to identify areas of specific concern. The sample sizes were small, and the statistical significance of the differences can be questioned. Pragmatically, however, this may be the most equitable selection process.
Conclusions: Regardless of methodological concerns using FASD prevalence rates has been useful to select

intervention sites.

4046

Looking to the future evidence infrastructure at NICE: Research surveillance, synthesis and use

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Objectives: To design and build an information architecture which facilitates the early identification of research evidence; its rapid curation and classification; synthesis; and its use in guideline development. This work is under development at the National Institute for Health and Care Excellence (NICE), England, the EPPI-Centre, UCL and MAGIC.
Results: A new federated search platform ('HDAS') was developed. Users can set up searches across multiple databases (e.g. PubMed, Embase, Cinahl) utilising a bespoke 'language' to translate searches from one database provider to another. Searches can be set to run periodically and the references downloaded and deduplicated against a master 'index' database of studies. References will then be downloaded into EPPI-Reviewer and classified using machine learning according to which guideline domain they 'belong' to. The full text of references with high probability of relevance can be automatically identified and retrieved. Automated data extraction of key concepts and structured data from tables takes place. References are scanned by human users and incorporated into syntheses. The results are published as web services and consumed by the MAGICapp platform and made available for guideline developers. Core technologies include the use of semantic web and appropriate ontologies and controlled vocabularies to facilitate the effective sharing and re-use of data.
Conclusions: This pilot system architecture demonstrates the utility of emerging technologies to greatly enhance the efficiency of research surveillance and use.

4047

Use of an influence-interest grid for stakeholder analysis to develop a national engagement and implementation programme

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Background: The National Institute for Health and Care Excellence (NICE) has a small field team of eight people who engage directly with UK health and social care commissioners and providers to encourage and support the implementation of national guidance. Each year the team evaluate who would be most effective to engage with in order to increase implementation and uptake. In a changing landscape, and with limited resources, the team tested a new approach to stakeholder analysis, in order to identify high-impact stakeholders and more accurately tailor specific implementation activities to different stakeholders, dependent upon their interest and influence.
Objectives: Review the field team's methods of external engagement, and test a new approach, using an influence-interest grid to identify the highest impact stakeholders to prioritise for activity within the annual engagement plan for 2016-17, in order to increase uptake of national guidance.
Methods: The team conducted a stakeholder-mapping exercise to identify all relevant stakeholders, and completed an influence-interest grid. We identified appropriate activities for each quadrant on the grid, and a tailored programme of activity was then developed for each. Success criteria were developed to ensure the team delivered engagements which had the most impact on uptake of national guidance, therefore using team resources to best effect.
Results: A programme of engagement delivering different activities to different stakeholders, based on their

influence and interest was developed and delivered over 12 months. Success criteria, developed to ensure the objectives of the engagement plan were achieved.
Conclusions: Conducting stakeholder mapping, and using an influence-interest grid for stakeholder analysis, targeting different implementation activities to different stakeholders was an effective way of enabling the field team to increase their capacity and influence. The team delivered a more focused programme of external engagement, whilst also achieving the organisational targets and team success criteria.

4048

Evaluation of patient satisfaction using a clinical practice guideline for shoulder pain based on a leaflet in traditional Korean medicine: A randomised-controlled trial

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Background: This study aimed to assess patients satisfaction using leaflets based on evidence-based clinical practice guideline (CPG) that were developed to assist in decision making in the diagnosis and treatment of shoulder pain patients.
Methods: We conducted a two-parallel-arm, crossover design, assessor-blinded, randomized controlled trial that included 50 patients who were recruited from the department of Oriental Rehabilitation Medicine of the Gwangju Medical Center. We used leaflets based on traditional KM (Korean medicine) CPG that were established with the aim of aiding clinical decision making regarding treatment for KM doctors as communication tools for patient. These leaflets included information about grade of recommendation and evidence levels. The intervention group was composed of patients to whom traditional KM doctors explained the treatment with the leaflet, and the control group received explanations about the treatment from doctors without the leaflet. Result: We performed an inter-group comparison to evaluate the degree of satisfaction with the use of the leaflet using a 1-5 item questionnaire. In group 1, the leaflet was used in the first session of assessing the degree of satisfaction but was not used in the second one. Conversely, in group 2, we did not use the leaflet in the first session of the assessment but did use it in the second assessment. The mean levels of patient satisfaction were 23.32 points in the leaflet group and 23.36 points in the non-leaflet group. In group 2, the mean levels of patient satisfaction were 22.88 points in the non-leaflet group and 23.88 points in the leaflet group. Regarding the pattern exhibited by group 1, the effects due to the use of the leaflet might have been associated with the second session of the assessment. Regarding to the pattern exhibited by group 2, the use of the leaflet was found to be associated with an increased level of patient satisfaction.
Conclusions: This study provided evidence that the provision of evidence-based CPG leaflets on shoulder pain to patients during examinations by doctors may effectively improve patient satisfaction and reduce doctor-patient information asymmetry.

4049

Forecasting the future publication rate of dementia-related systematic reviews

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Background: Systematic reviews are often used when attempting to understand large and evolving areas of investigation, such as dementia research. However, the publication rate of systematic reviews is increasing, raising the possibility that their number will become unmanageable. Our aim was therefore to forecast the future publication rate of dementia-related systematic reviews.
Methods: We based our forecasts on the number of prior relevant systematic reviews identified in our EMANATE

database (updated 7 February 2017), based upon a systematic review of all dementia-related systematic reviews identified from five databases (MEDLINE, EMBASE, PsycINFO, CINAHL, and Cochrane Database of Systematic Reviews). Publications from 2016 onwards were excluded due to reduced numbers reflecting the time lag between publication and inclusion in the databases. Preliminary visual inspection revealed a nonlinear relationship. Therefore, we modelled the predicted number of publications and their 95% prediction intervals (PIs) using polynomial regression. Predicted number of publications were calculated for observed years (1989-2015), and forecast for the following 10 years (2016-2025).
Results: The observed number of publications ranged from 2 in 1989 to 356 in 2015. A quartic model gave the best fit to the observed data in comparison with linear, quadratic, cubic and quantic models (indicated by the lowest Root Mean Square Error and highest adjusted R2 value). The predicted number of publications fit the observed data very well (R2=0.99; Figure 1). Our model forecasts that the number of dementia-related systematic reviews will reach 892 by year 2020 (95% PI 765-1019), and 1896 by year 2025 (95% PI 1486-2306).
Conclusions: We forecast that the publication rate of dementia-related systematic reviews will be more than five times higher in 2025 in comparison with 2015. Methodological innovation may be needed to ensure that the value of systematic reviews is not diminished by their burgeoning number.

Attachments: Figure1Forecast.png

4050
Adopting a knowledge translation framework and applying information strategies for fall prevention among hospitalised patients

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Background: Preventing in-hospital fall and associated injury is one of the imperative quality indicators in hospitals. It is also an important challenge for health professionals.
Objectives: The aims of this study were to revise the fall-prevention guidelines for inpatients, as well as to establish "fall prevention nursing decision aids" and "prone to fall medication reminder system" in promoting knowledge translation.
Methods: This is knowledge-translation research based on the "knowledge-to-action conceptual framework" (Graham et al., 2006). There are two stages including: (1) Knowledge creation: We systematically reviewed the existing fall-prevention guidelines to explore the gap between best evidence and clinical practice. Accordingly, the inpatients' fall-prevention guideline of the target hospital was revised. (2) The action cycle: A single centre intervention, before-after study design, was conducted in a medical centre between January and December 2015. The main outcome measures were fall rate (%), fall-related injuries (%), and compliance rate of fall-prevention guidelines among health professionals. For statistic method, we applied Poisson regression model and independent t-test. A $p < .05$ value is considered statistically significant.
Results: After the intervention, the fall rate was significantly reduced to 0.07% ($\hat{\beta} = -0.37$, $p = .02$); however, here was no significant effect on fall-related injury ($\hat{\beta} = 0.25$, $p = .64$). In addition, the compliance rate of utilising fall-prevention guidelines among health professionals was significantly improved up to 95.0% (mean difference = -8.52, 95% CI -10.29~ -6.75, $t = -9.48$, $p < .001$).
Conclusions: The application of the "knowledge-to-action conceptual framework" and information strategies in study hospital significantly reduced the fall rate, and increased the compliance rate of fall-prevention guideline among health professionals. However, the fall-related injuries were not significantly improved. Further research is needed on fall-prevention strategies.

4051

High-level evidence of acupuncture analgesia published in PubMed-listed journals: A descriptive analysis

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Background: Evaluating the clinical efficacy of acupuncture analgesia with high-level evidence, such as Systematic Review (SRs) and randomised-controlled trials (RCTs), has attracted wide interest.
Objectives: To collect a sample of published SRs and RCTs on acupuncture analgesia in PubMed and examine them in terms of reporting characteristics and quality.
Methods: A search in PubMed was performed in January 2017. All SRs and RCTs on acupuncture analgesia were included. To assess the quality of the RCTs, CCRBT was used. For the SRs, AMSTAR and PRISMA Statements were used. EndNote X4 and Excel were used for data description and analysis.
Results: 4045 articles were retrieved in total, the high-level evidence was 372, which included: i) SRs (139, 3,4%), the yearly number of publications ranging from 1 in 1997 to 28 in 2016; 18 (12.9) SRs were Cochrane Systematic Reviews, and 123 (88.5%) were published in Science Citation Index (SCI) journals; The UK was the country with the highest number of publications (34, 24.5%). Low back pain (16, 11.5%), headache (10, 7.2%), cancer pain (9, 6.5%), and labour pain (9, 6.5%) were the most reported diseases or phenotypes; 78 (56.1%) SRs conducted meta-analysis using RevMan software, and 64 (46.0%) SRs used the CCRBT for quality assessment; 71 (51.1%) SRs were assessed as high reporting quality, and 26 (18.7%) were high methodological quality. RCTs (233, 5.8%), which were identified across 61 journals, of which 56.7% of articles were SCI-indexed (impact factor 0.4–20); Most of the articles were published in China (105, 45.1%), UK (51, 21.9%) and USA (50, 21.5%); Postoperative pain (21, 9.0%) and manual acupuncture (107, 45.9%) was the most prevalent; 192 (82.4%) trials were considered to be at high risk of bias.
Conclusions: The quantity and the quality of the SRs and RCTs regarding acupuncture analgesia have been promoted in recent years. More effort should be expended on the reporting and methodological quality to improve the validity of the high-level evidence.

4052

Development of evidence-based medicine: From the perspective og the Cochrane Colloquium

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Background: Evidence-based medicine (EBM) integrates clinical experience and patient values with the best-available research information. The future holds promise for improved primary research, better EBM summaries, greater access to these summaries, and better implementation systems for evidence-based practice. The Cochrane Collaboration (CC) is a unique, worldwide not-for-profit organisation that aims to help people make well-informed decisions about healthcare, the Cochrane Colloquium can maintain and disseminate systematic reviews of healthcare interventions in order to assess the effects of healthcare practices.
Objectives: To retrospectively analyse the accepted abstracts from the Cochrane Colloquiums in the past six years, so as to learn the advances and development trends for the next stage in evidence-based medicine field.
Methods: We collected abstracts accepted by the 19th to 24rd Cochrane Colloquiums and extracted relevant information, including the countries, authors, contributing institutions, the top topics and so on. The number and

proportion were also calculated then a descriptive analysis was conducted.
Results: A total of 2403 abstracts were accepted in recent six Cochrane Colloquiums. Europe contributed the most abstracts - in the top 10 contribution countries, five countries were located in Europe. Colleges/Universities were the major contributing institutes, McMaster University of Canada (183, 7.62%) and Lanzhou University of China (134, 5.57%) were the top two contributing institutions. The number of authors of most accepted abstracts were 3 to 5 (1215, 50.56%). The top three topics focused by these abstracts were evidence (475, 19.77%), methodology (491, 20.43%) and risk of bias (267, 11.11%).
Conclusions: European countries are major contributing countries of abstracts of the Cochrane Colloquium, and colleges/universities are the major contributing institutions. Retrieval and methodology are research hot topics in the past 6 years. Attention should be paid to breakthrough progress in methodology in future.

Attachments: Development of Evidence-based Medicine Focus on the abstracts of the Cochrane Colloquium.pdf

4053
Off-label use of medicines: Considerations for National Institute for Health and Care Excellence guideline development

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Background: All medicines prescribed in the UK should have a 'licence' granted by MHRA, i.e. medicine is effective, clinical safety has been assessed and manufacturing process produces a quality product. When licensed medicines are used outside of this marketing authorisation this would be 'off-label'.
Objectives: To determine the context for recommending off-label use of medicines in NICE guidelines.
Methods: Clinical guidelines (2012 onwards) were examined for review questions including off-label use of medicines.
Results: 43 guidelines were identified and we classified recommendations as: -off-label indications for adults or adults and children/young people, in 24 guidelines -off label indications in children/young people only, in 13 -class of medicines where only some members are licensed for specific indication in 5 -off-label doses in 2 -combinations of medicines not included in licence in 3 -unlicensed medicine in 1 -also, nutraceuticals or herbal medicines in 3 Particular issues included where an off-label medicine was recommended over a licensed medicine based on evidence of higher effectiveness, or where no published evidence for licensed product was available whereas evidence was available for a medicine used off-label. Also differences in licensing among members of a class of medicines and also between branded and generic medicines; in some questions evidence for all medicines was reviewed but recommendations applied to only licensed medicines. Some questions included off-label medicines where no licensed medicine was available.
Conclusions: The NICE guideline manual provides advice on reviewing off-label medicines. And any recommendations must inform the prescriber that use is off-label as the prescriber must take full responsibility for prescribing medicines outside the terms of their licence; good practice wording is agreed in collaboration with MHRA. It is important to identify off-label use of medicines early in the guideline-development process and consider the risks in terms of effectiveness, safety and availability and quality of product and the resultant implications for prescribers and practice.

4054
Trial tracking in guidelines surveillance: Case studies

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Background: The aim of guideline surveillance is to assess whether guideline recommendations need to be updated. NICE guidelines typically undergo scheduled surveillance every 2-4 years after publication, however, important studies that can impact on the currency of a guideline often publish in the intermediate periods between surveillance reviews.
Objectives: To report on a trial-tracking process introduced into NICE guideline surveillance to respond to individual studies published between scheduled surveillance.
Methods: Individual case studies will be used as examples to describe how a process for tracking trials has been implemented alongside the standard scheduled surveillance process.
Results: We will present our learning and experience of implementing a trial tracking process with a focus on: • The key steps needed for tracking trials • The robustness and feasibility of this approach • Impact on update decisions • Resource impact
Conclusions: The implications of tracking trials as an additional surveillance approach to inform update decisions will be discussed, specifically focusing on how this process may impact on methods to develop, maintain and evaluate guidelines. Implications for guideline developers/users: This presentation will describe an approach for tracking and responding to important trials in between guideline surveillance reviews.

4055

Health in my language: Evaluating health-domain adapted machine translation for Cochrane plain language summaries

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Background: Health in my Language (HimL) is an EU-funded, three-year project. It aims to address the need for reliable and affordable translation of public health content into different languages via fully automatic machine-translation (MT) systems, initially focusing on translation from English into Czech, German, Polish, and Romanian. Recent advances in MT are used, including in domain adaptation, translation into morphologically rich languages, terminology management, and semantically enhanced MT. Cycles of incorporating improvements into the MT systems are being iterated annually, with careful evaluation and user acceptance testing. Health information produced by Cochrane and NHS24 serves as the test case, and will be translated in each cycle and also published on their websites.
Objectives: To evaluate the quality and to test the usability of the obtained machine translations; and to measure the effect on post-editing and web access.
Methods: Different automatic evaluation metrics are applied to assess quality. The planned human evaluation tasks are: - annotation of semantic components to assess accuracy; - ranking of MTs generated using different MT systems against each other; - online survey to assess user acceptance; - post-editing of MTs to measure speed compared to post-editing of baseline MTs and fully manual translation; - text gap-filling to assess comprehension. Web usage statistics will be collected to assess the effect on website access of the published MTs. Results and conclusions: The second version of the MT system was deployed in September 2016, and human semantic annotation and ranking have been conducted, user testing is in progress. Results from ranking and annotation varied between different MT systems and different text types (i.e. Cochrane and NHS24 texts). The evaluation provided further guidance for the final iteration of system development. The third and final system will be deployed in September 2017. The 2016 evaluation results will be presented at the Summit, as well as an outlook on the 2017 evaluation plan.

4056

Measuring the long-term sustainability of an evidence-based innovation programme - dysphagia identification and management in post-stroke patients: A study protocol

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Background: Dysphagia is one common symptom of post-stroke and can easily be neglected by clinical nurses. Early identification and management can help to reduce the incidence of complications, lower medical cost, improve patients' quality of life. Foreign guidelines relating to post-stroke dysphagia identification and management are abundant and mature, but they may not be totally suitable for the situation in China and should be localised. An evidence-based practice (EBP) programme on this has been conducted in one hospital in China. As one indispensable part of an EBP programme, sustainability is of great significance to make change last. While researches have shown that few EBP programmes can be sustained.
Objectives: To evaluate the long-term sustainability possibility of this EBP programme, identify the facilitators and barriers and take relevant measures to sustain this programme.
Methods: Both quantitative and qualitative approaches will be utilised to dig out the potential factors influencing the sustainability of the innovation programme. With the help of the NHS sustainability tool (a world-renowned sustainability testing and scoring system containing 3 domains - process, staff and organisation, in total 10 factors. It's characterised by the function of predicting innovation sustainability through the total score from each factor), we will score each factor contributing to sustainability every 3 months and predict the possibility of long-term sustainability. And semi-structured in-depth interview to key informants, like the head nurse, staff nurse of the experimental unit and director of the nursing department are also conducted to understand the potential factors hindering sustainability. The specific outcome indicators relating to post-stroke dysphagia identification and management are also monitored (e.g. the length of hospital stay, patients' quality of life, patients' satisfaction on nursing work, etc.). We will take measures to remove or relieve those identified barriers, and compare the before-after outcome indicators.
Conclusions: More importance should be attached to EBP programme sustainability.

4057

Strengthening clinical governance in low- and middle-income countries: A systematic (scoping) review

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Background: Clinical governance (CG) is necessary for promoting quality, accessible healthcare and a sustainable health system. While many high-income countries have adopted integrated system-wide CG approaches, many low- and middle-income countries (LMICs) have not implemented unified CG systems.
Objectives: We examine efforts towards improving CG in LMICs, asking: What strategies are being used to strengthen CG in LMICs and what opportunities and challenges arise in instituting and sustaining CG?
Methods: Our search strategy sought to identify peer-reviewed literature on implementation and experiences of CG at district-, regional- and national-levels in LMICs. Using PUBMED, Global Health and SCOPUS databases, we

selected materials published from 2000 (when the World Health Organization renewed its vision for system-led quality improvement) to 2016. Based on inclusion criteria, titles and abstracts, and full texts are being screened independently by two team members. We have developed a conceptual framework for data charting and synthesis around five emerging dimensions: (i) CG - policy or framework, (ii) systems, (iii) institutions or agents of change, (iv) resources, and (v) methods of evaluation.
Results: Our initial search output (sans duplicates) generated 4781 papers, which reduced to under 500 following first-stage exclusion of disease-specific, single facility and within-project CG. As we move towards screening completion, we estimate that approximately 60 full text papers will be extracted for analysis and synthesis. Preliminary review of full text papers suggests that many LMICs are moving towards adopting integrated CG systems. Projects and agendas of external institutions/bodies are driving many LMICs' national quality improvement priorities. Strategies for strengthening CG are dominated by human resource capacity building interventions, over technologies, accreditations, integrated policy frameworks and regular evaluation of existing CG systems. Final results will be presented at the conference.
Conclusions: This review will map the progress of LMIC towards establishing and strengthening clinical governance systems.

4058
Cochrane Clinical Answers: Enabling the evidence to make a difference

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Background: Healthcare professionals need tools to enable them to implement the reliable and high-quality synthesised information from up-to-date research. Cochrane Reviews provide a valuable source of evidence synthesis, but can take a long time to read and have a large volume of data, much of which may not be relevant to the busy clinician. Cochrane Clinical Answers (CCAs) provide an accessible, clinically-focused summary of Cochrane Reviews to make them usable for this important audience.
Objectives: To describe how the presentation of data in CCAs aids evidence implementation.
Methods: The CCA website was developed to mimic the way clinicians approach information gathering, bringing to the forefront the data that are most important to making a decision on the potential treatment benefits and harms of treatments. Since the CCA website was launched in 2013, we have evolved the data presentation in response to feedback from users, honing the data presented to respond best to their needs.
Results: Each CCA addresses a question and provides a concise, outcome-focused synthesis of the results of a Review, with an overarching take-home message. Full outcome data supporting the Answer are a click away. The population, intervention and comparator (PICO) information, a narrative result, the quality of evidence or risk of bias summary, a link to the forest plot and absolute values are also provided to allow quick understanding and application of results. The CCA format is also used to present results from overviews and network meta-analyses, as clinicians benefit from reliable and accurate clinician-friendly summaries of these complex Cochrane Reviews, enabling them to answer the key questions: which of these range of interventions best meets the needs of my patient.
Conclusions: CCAs are a great tool to filter the vast amount of data from Cochrane Reviews and make it easier for healthcare professionals to apply high-quality evidence when managing patients.

4059
Rethinking communication – Integrating storytelling for stakeholder engagement in evidence synthesis

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Background: Complex issues need to be communicated in a comprehensible way to generate engagement and action. There is a link between effective science communication and good decision making. Science has traditionally been communicated as isolated logical ideas with little context given to the target audience, risking that audiences place new knowledge into preconceived understandings. Storytelling, a well-known and powerful means of communicating messages and engaging audiences, has historically not been commonly used in science communication, let alone evidence syntheses. Yet, an increasing number of studies show how narratives are useful for developing trust with audiences and increasing knowledge retention and the ability and willingness to learn and take action. Storytelling for stakeholder engagement We present a framework to integrate storytelling in systematic reviews and maps at stages where stakeholders are actively involved, in evidence synthesis across sectors in general but particularly in environmental management and conservation. We argue that storytelling holds potential as one of many tools for stakeholder engagement in evidence synthesis, serving two purposes (Figure 1). First, collecting contextual narratives from stakeholders at the stages of question formulation and protocol writing can help to inform and generate relevant research questions and review designs. Contextual narratives are stories gathered from stakeholders to gain an understanding of their perspective. Second, creating a central story that faithfully presents the review results but situates them in the contextual narratives can contribute to effective communication of the results to stakeholders and to a broader audience, potentially increasing their engagement and the implementation of evidence-based decisions. Conclusion: Storytelling holds untapped potential for communicating evidence from systematic reviews and systematic maps for increased stakeholder engagement. It is time for researchers and research networks to support and emphasise the importance of exploring new tools for effective science communication, where integration of storytelling may be one such tool.

Attachments: Figure 1.pdf

4060

Recommendation for axillary lymph node dissection in women with early breast cancer and sentinel node metastasis: A systematic review of randomised-controlled trials using the GRADE system

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Background: In 2014, the American Society of Clinical Oncology (ASCO) published a clinical practice guideline on the use of sentinel lymph node (SLN) biopsy for early-stage breast cancer patients. However, these recommendations have been challenged because they were based on data from only one randomised-controlled trial. Although controversial, ASCO refused to make change on their recommendation in 2016 updated guideline.
Objectives: We evaluated the rationale of these recommendations by systematically reviewing RCTs using the Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) system.
Methods: We searched articles in the PubMed, EMBASE, CINAHL, Scopus, and Cochrane databases. The primary endpoints were overall survival (OS) and disease-free survival (DFS). The secondary endpoints were recurrence rate and surgical complications of axillary dissection. The quality of evidence was assessed using the GRADEpro GDT. Our recommendations were compared with those of ASCO 2016 guideline.
Results: Five eligible studies were retrieved and analysed. We divided SLN metastasis into two categories: SLN micrometastasis and SLN macrometastasis. In patients with 1 or 2 SLN micrometastasis, no significant difference was observed in OS, DFS, or recurrence rate between the axillary lymph node dissection (ALND) and non-ALND groups. For patients with 1 or 2 SLN marcometastasis, only one trial with a moderate risk of bias was included, and non-ALND was the preferred management overall. However, ALND might be appropriate for patients who placed a greater emphasis on longer-term survival at any cost.
Conclusions: Our recommendations are similar to those of ASCO 2016 guideline. However, the optimal practice of evidence-based medicine should incorporate patient preferences, particularly when evidence is limited. Perhaps downgrading the level of evidence and changing the wording will stop the argument on ASCO guideline.

Attachments: SLNB abstract.pdf

4061

The reporting characteristics of WHO guidelines

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Background: Clear and transparent reported practice guidelines could help healthcare practitioners, health administrators, programme managers, and the public to understand and implement recommendations.
Objectives: To investigate the reporting characteristics of WHO practice guidelines according to the RIGHT statement.
Methods: We examined WHO guidelines published in 2015 and 2016, and included those published in English. We obtained a list of all such guidelines from the GRC Secretariat, and downloaded documents from the WHO website. We referred to the Reporting Items for practice Guidelines in HealThcare (RIGHT) Statement to design our extraction form, and two researchers independently extracted data and solved disagreement through discussion.
Results: Twenty-two guidelines were included, and 16 and six were published in 2015 and 2016 respectively. According to the RIGHT reporting tool, there were no guidelines reported the limitation of guideline; the retrival method of existed systematic review (45%) and role of funder (36%) were reported in under 50% of the guidelines; the reporting rate of the focus of the guideline, abbreviations/ terms, the use of systematic review, and outcomes selection fell into 50-75% (68%, 68%, 73% and 64%), and; all the rest items were reported in over 85% of the gudelines, five were 86%, five were 91%, eight were 95%, and nine were 100%. The detailed information can be found in the table provided in attachment.
Conclusions: The general reporting of WHO guideline is in a good condition. But there is still room to improve, especially on the reporting of the limitation of guidelines, existed systematic review retrieval and the detailed role of funders.

Attachments: RIGHT-WHO-reporting.pdf

4062

Declarations and conflicts of interest in WHO guidelines

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Background: The identification and appropriate management of conflicts of interest (COI) are essential for assuring trustworthy guidelines.
Objectives: We aimed to examine the declaration of interests (DOI), management of COI, and the funders for World Health Organization (WHO) guidelines.
Methods: We examined all Guidelines Review Committee (GRC)-approved WHO guidelines published in English from 2007 (inception of the GRC) to November 2016. We obtained a list of all such guidelines from the GRC Secretariat, and downloaded the documents from the WHO website. Characteristics of each guideline including funders' and contributors' DOI and COI were independently extracted by two researchers. Binary logistic regression was used to assess the associations between declarations and the number of developers.
Results: 178 WHO guidelines fulfilled inclusion criteria, encompassing 14 clinical or public health fields. Funding sources were reported in 73% of guidelines: the most common funders were governments. DOI for external contributors were reported in 89% of the guidelines, of which 48% indicated no contributors with COI, 36% reported one or more contributors with COI, and 16% reported collecting DOI but not whether COI existed. Financial COI were reported more frequently than nonfinancial COI. The difference of DOI reporting between guidelines developed solely by WHO and co-developed with other organisations was insignificant (91% versus 79%, P=0.05).
Conclusions: WHO guidelines generally reported their funding sources, and the DOI and COI of external contributors However, the role of funders, declaration processes, and how COI were assessed and managed were often not provided. WHO and the guideline community in general need to continue to look for more efficient and effective approaches for identifying, quantifying and minimising potential sources of bias in guideline development.

4063

Producing evidence to inform policy and practice: A worked example of two reviews in health and social care

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Background: The purpose and conceptual clarity of a review can influence the type of institutional mechanisms and evidence synthesis approaches required to produce useful review products for policy and practice. Systematic reviews may be commissioned for use as public goods to address common problems or focus on addressing local or national policy concerns (purpose). The key concepts and definitions in a review may also vary from very well to not very well defined (conceptual clarity, Oliver et al. 2015).
Objectives: To explore the institutional mechanisms that emerged and methodological approaches taken in the production of two reviews in health and social care.
Methods: A worked example of each review was developed using framework-synthesis methods. We also drew on our reflexivity to generate new insights into the process of working at the policy-research interface.
Results: When conducting a mixed-methods systematic review on the impact and delivery of mental health and psychosocial programmes for people affected by humanitarian emergencies we adopted standardised procedures for producing evidence syntheses for public use and worked closely with commissioners and topic experts to support the development of contextually relevant findings for the humanitarian aid field. When commissioned to produce evidence informing UK policy on improving outcomes for adults accessing social care services we were faced with a diverse and largely unknown literature. To address this challenge we drew on new methodological developments in meta-reviews. Conducting a meta-review enabled us to synthesise review-level evidence on the effectiveness of a much broader range of programmes than would have been feasible in a typical systematic review, in the same policy time-frame. In each review, a designated knowledge broker, acting as an intermediary between the policy customer and reviewers, helped span the worlds of policy and research to aid the overall review process. Conclusion: Both reviews benefitted from engaging with institutional mechanisms and drawing on a combination of standardised and diverse systematic review methodologies to fulfill their policy and practice brief.

4064

What are the barriers to, and facilitators of, implementing and receiving MHPSS programmes delivered to populations affected by humanitarian emergencies? A qualitative evidence synthesis

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Background: Humanitarian emergencies can have a direct impact on the psychosocial well-being and mental health of children and adults. Providing mental health and psychosocial support (MHPSS) to those exposed to emergencies is a key component of many humanitarian aid responses.
Objectives: To conduct a systematic review on the barriers to, and facilitators of, implementing and receiving MHPSS programmes delivered to populations affected by humanitarian emergencies in low- and middle-income countries.
Methods: A comprehensive search of 12 bibliographic databases, 25 websites and citation checking was completed by June 2016. Studies published in English from 1980 onwards were included if they contained qualitative evidence on the perspectives of adults or children who had engaged in, or programmes providers involved in delivering, MHPSS programmes in humanitarian contexts. Thirteen studies were critically appraised and synthesised thematically.
Results: Community engagement was a key mechanism to support the successful implementation and uptake of MHPSS programmes in humanitarian settings. In particular, mental health sensitisation and mobilisation strategies and the need to develop effective partnerships with local communities, government and non-governmental organisations were seen as pivotal in increasing programme accessibility. Establishing good relationships with parents may also be important when there is a need to communicate the value of children and young people's participation in programmes. Sufficient numbers of trained providers were essential in ensuring that a range of MHPSS programmes were delivered as planned but could be challenging in resource-limited settings. Programmes need to be socially and culturally meaningful to local populations to ensure they remain appealing. Recipients also valued engagement with peers in group-based programmes and trusting and supportive relationships with programme providers. Conclusion: The synthesis identified important factors that could improve MHPSS programme reach and appeal. Taking these factors into consideration could support future MHPSS programmes achieve their intended aims.

4065

Predicting, tracking and evaluating results across the project cycle: GIF's approach to results measurement

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Background: The Global Innovation Fund (GIF) is an evidence-based investor in public and private innovations that can benefit people living on less than $5/day. It seeks to maximiSe the benefits received by those people. It uses evidence as a screen for investment decisions; supports evidence-based feedback to improve implementation; and generates rigorous evidence to guide decisions on scale-up and replication. GIF and other funders face two challenges in impact assessment. First, finding a universal metric of impact. Appraising proposals across disparate sectors, GIF needs to decide which are the most impactful to support. Ex post, it seeks a concise way of aggregating the benefits it has created. Traditional universal metrics – 'people reached' or dollars disbursed – fail to capture the depth of impact. Second, funders are accountable for achieving results from their funding. But typical accountability cycles are shorter than the time needed to bring innovations from pilot to fruition at scale. And both funders and investees could use continuous feedback on results to improve outcomes.
Objectives: To create a system that concisely summarises impact across different classes of outcomes; that

supports and motivates selection and management of a portfolio of projects for maximum impact; and, that combines rigour and ease of application.
Methods: The system has two components: 1) Rigorous ex post application of project economic analysis, supported by projects with built-in impact evaluation. 2) Ex ante, and regularly updated, order of magnitude impact estimates incorporating people impacted; depth of impact (encompassing economic and non-economic welfare); and probability of success.
Results: The paper discusses challenges in implementing the system, including bias avoidance, and insights gained.
Conclusions: We describe a workable system with broad applicability to investment finance and impact investing.

4066

Rehabilitation practitioners' perceptions of clinical practice guidelines for stroke managment when working in rural primary care in South Africa

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Background: Stroke is one of the top leading causes of death worldwide but the largest burden related to this condition occurs in low- and middle-income countries. In 2013, stroke accounted for 82.4% of all deaths in South Africa. The most effective management for stroke remains rehabilitation. The use of clinical evidence-based practice helps to ensure a uniform level of care across all health sectors. Studies report that the use of clinical practice guidelines among healthcare practitioners is very low and the reason is not well understood. Aim: To explore rehabilitation practitioners' perceptions of clinical practice guidelines for stroke management when working in rural primary care hospitals in the Bushbuckridge local municipality, Mpumalanga province.
Methods:A qualitative study using purposive sampling was undertaken at three primary care hospitals in Bushbuckridge. Face to face in-depth interviews were conducted with study participants.Recorded data were transcribed verbatim by an independent transcriber and verified by the researcher. An inductive approach to qualitative data analysis was used to generate common themes and sub-themes from the transcribed data. Data were analysed manually by the researcher.
Results: Sixteen rehabilitation practitioners (physiotherapists [n= 7], occupational therapists [n= 5], speech therapists & audiologists [n= 4]) employed at the hospitals consented to participate in the study. Analysis of the data revealed a total of seven themes: 1) Familiarity and application, 2) Guideline functions, 3) Value of guidelines, 4) Patient management conducts, 5) Barriers affecting guideline utilisation, 6) Communication, content and design improvements, 7) Evaluations and staff training.
Conclusions: Rehabilitation practitioners in rural Bushbuckridge have little knowledge about clinical practice guidelines for stroke management. The study also revealed that although therapists reported the use of clinical practice guidelines beneficial for patient rehabilitation, the uptake was very low. This study also revealed that most therapists did not know the difference between a clinical practice guideline and a clinical protocol.

4068

Barriers to and facilitators of evidence utilisation in healthcare in low-income settings: A qualitative systematic review

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Background: Utilisation of research evidence has become a central requirement in healthcare. Although the notion of evidence-based practice has been widely embraced in the developed world, research shows this to be less understood and implemented within low-income settings. There is need to understand the factors

underpinning the uptake of evidence based practice within these settings.
Objectives: The aim of this review was to synthesise available evidence regarding the barriers to and facilitators of research evidence utilisation in healthcare practice within low-income settings.
Methods: A qualitative systematic review of literature was undertaken between October 2016 to March 2017. Six databases (CINAHL, Ovid MEDLINE (R) 1946, ASSIA, PsychInfo, Web of Science, and EMBASE) were searched followed by hand searching of reference lists. Methodological quality was assessed using the Qualitative Assessment and Review Instrument developed by the Joanna Briggs Institute (JBI-QARI). Qualitative findings were extracted using the JBI-QARI and synthesised using a pragmatic meta-aggregative approach.
Results: Nine studies were included. The review identified several factors influencing evidence utilisation in healthcare within low-income settings. The main barriers included: lack of knowledge about evidence based practice, lack of access to resources, unsupportive policies, lack of institutional/management support, negative attitudes towards evidence-based practice, and resistance to change. The main facilitators included: Collaboration with international institutions, participation of local stakeholders, staff motivation, context-based policies and guidelines, availing resources, proving trainings, and supportive policies.
Conclusions: Significant barriers challenge the utilisation of evidence in healthcare practice in low-income settings. Approaches to improving evidence utilisation in these settings should primarily focus on: building capacity through trainings; supportive institutional policies; and availing necessary resources. Limited research on this subject has been undertaken in sub-Saharan Africa and future research should target this context.

4069

Why do healthcare professionals use eTG complete instead of clinical practice guidelines when making prescribing decisions?

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Background: Clinical practice guidelines are rarely used by clinicians at the point of care because they are difficult to access and narrowly focused, and recommendations are hard to find and rarely actionable. Point-of-care guidelines are comprehensive and accessible, providing users with digestible information curated by a trusted source. They are increasingly popular with healthcare professionals, despite most requiring a subscription fee.
Objectives: To illustrate that guideline recommendations need to be accessible, integrated, organised, focused, searchable, and actionable to be widely used by healthcare professionals at the point of care.
Methods: Therapeutic Guidelines Ltd (TGL) solicits feedback from stakeholders and users at the start of each guideline update project. Unsolicited feedback is sent directly to TGL by users. Focus groups and formal market research are undertaken occasionally to answer specific questions, such as usability of digital products. Key end-user groups (general practitioners, junior doctors, pharmacists) comprise one third of guideline panels to ensure that information meets their needs. Google Analytics and other online tools generate data on scope, navigation, user demographics and website access methods.
Results: Case studies will be presented to illustrate how different types of user data contribute to development of eTG complete (a digital integrated point-of-care guideline portal). Approximately 600 clinical issues were raised by eTG complete users between January 2014 and December 2016 and each of these was considered by the relevant guideline panel. Survey data and online usage data — which can be broken down by user group — give an insight into the most important usability features for point-of-care guidelines.
Conclusions: Firstly, speed of information retrieval is the most important consideration for users of point-of-care tools, and this is underpinned by editorial rigour and smart digital navigation. Secondly, decisions about content and functionality must be based on user data from multiple sources to maximise utility and relevance at the point of care.

4070

Development of an Evidence-Based Nursing Information System in Taiwan

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Background: Barriers for evidence-based nursing (EBN) practice in Taiwan include the preponderance of English language based literature and the large numbers and types of sources of information. This makes it difficult to identify the best evidence to guide nursing practice.
Objectives: The project aim is to establish a Chinese language information system that will host evidence-based standards of practice for Taiwan nursing. Key objectives include: establish support for the project; develop the structure and content of an EBN information system; and obtain commitment for support and use of the system in the majority of hospitals in the country.
Methods: Support for the project was obtained through a series of meetings with key stakeholders. Then an EBN taskforce was formed that included EBN experts and other stakeholders. Ongoing meetings were held, and the information system framework was developed. A review of gold standard websites that support evidence-based practice (SIGN, NICE, National Guideline Clearinghouse, and Cochrane system) was used to inform the development of the structure and content of the EBN information system. The finished programme was then introduced at two national workshops and commitments for ongoing support and use were requested.
Results: Widespread support for development of the system was obtained from the legislative educational and service sectors. Taiwan Nurses Association support the budget for this information system. After the system was developed, submission guidelines and review checklists to assure quality were developed. The new system was then introduced to 120 key nursing leaders through two workshops; 88% provided additional input and provided commitment to support continued development and use of the system.
Conclusions: The Evidence-Based Nursing Information System could collect the evidence synthesis and improve the implementation in clinical practice. Currently 20 EBN synthesis articles, 10 EBN application papers, and 5 EBN guidelines have been collected and are under review for inclusion in the system. This system will be made available and be useful for other Chinese-speaking nurses.

4071

Implementation of basic newborn resuscitation guidelines among healthcare providers in Maragua District Hospital: A best-practice implementation project

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Background: A majority of the deaths under five years are attributable to neonatal causes. Perinatal asphyxia accounts for a significant portion of these deaths, especially in developing countries. These deaths are largely preventable, and interventions geared towards assisting newborns to initiate their first breath within the first minute of life have markedly reduced mortality.
Objectives: The overall aim of this project was to assess compliance with evidence-based criteria regarding newborn resuscitation among healthcare workers in the maternity units in Maragua District Hospital.
Methods: This implementation project was conducted in the maternity units of a busy district hospital in Kenya. Evidence-based audit criteria (Table 1) were developed on the basis of an evidence summary developed by the Joanna Briggs Institute. Using the Joanna Briggs Institute Practical Application of Clinical Evidence System software, a baseline audit was conducted including a sample size of 55 health care providers and 300 patient case notes followed by an identification of potential barriers and strategies to overcome them (Table 2). A follow-up audit including a sample size of 55 healthcare providers was conducted by using the same audit criteria.
Results: The baseline audit (Figure 1) demonstrated that three of the five audit criteria were found to be less than

50% indicating moderate compliance with current evidence with regards to newborn resuscitation. Following implementation of the strategies (Table 1), which included a six-week education and demonstrative skills training, updating of the protocols and equipment, there was a significant improvement in all the criteria audited. Subsequently the first four criteria achieving 100% compliance, and the fifth criteria achieving 90% (Figure 2).
Conclusions: On completion of the project there was an increased awareness on newborn resuscitation. There was also a significant reduction in admission of newborns with birth asphyxia to the newborn unit.

Attachments: Tables.pdf, Figures.pdf

4072

Cochrane Russia capacity building: Dissemination of Cochrane evidence, improving quality and measuring performance

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Background: Cochrane Russia manages a Russian translation project with a team of 140+ volunteers from Russia, Kazakhstan, Kyrgyzstan, Ukraine, Uzbekistan, Armenia, USA, UK, Germany. We translate and disseminate Cochrane plain-language summaries (PLS), blogshots, podcasts, press releases, Cochrane Comms weekly digests, Cochrane news and videos. By 2017 we reached 1000 PLS translations and in January involved students of the Institute of International Relations (IIR), Kazan Federal University.
Objectives: To assess progress in Cochrane Russia capacity building through impact assessment of translation/dissemination work and quality assurance of Russian translations.
Methods: We analysed our progress in numbers of produced/disseminated items; and used Google survey to re-assess user feedback in March 2017 versus 2016, 2015. The survey contains 10 questions on clarity, quality, needs, impact, and suggestions for improvement.
Results: By 14 March 2017 we reached 1108 PLS translations. Cochrane Russia produced 48 podcasts, 85 blogshots, 60 translations of Cochrane Comms weekly digests, 30 press releases and Cochrane news. Russian blogshots featured in top-5 viewed categories on Cochrane Tumblr account, Quarter 4, 2016. We have 1700+ followers Vkontakte, 860+ twitter, 230+ Facebook, totalling nearly 3000, 85% from Russia. The monthly number of VKontakte page views is over 2000. By March 2017, 221 people responded to the online survey. Russian translations are mostly clear (n=210; 95%), with quality rated excellent (n=58; 26% vs. 24% vs 31%), good (n=129; 58% vs 61% vs 51%), satisfactory (n=25; 11% vs. 11% vs. 14%). 98% respondents noted good compliance of Russian translations with original English texts. The same high proportion of respondents (n=210, 95% vs. 96% vs. 92%) recognise the need for Cochrane evidence for Russian-speaking countries.
Conclusions: Further development will build on cooperation with professional translators, continuous quality improvement, and performance measurement to assure sustainable excellent results in translation/dissemination work.

4073

Improving the usability and efficiency of trial registration and updating processes on the Australian New Zealand Clinical Trials Registry (ANZCTR)

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Background: Prospective trial registration is widely accepted as an essential process to improve transparency and reduce research waste. As a primary registry in the World Health Organization's (WHO) Registry Network, it is

important for the ANZCTR to provide a user-friendly interface which facilitates trial registration and encourages users to keep their records up-to-date. ANZCTR staff are required to review all registration and update submissions and email queries to the registrant if the WHO minimum dataset items are not completed to an acceptable standard, or if there are inconsistencies or errors in the information provided. The registrant must address these queries and re-submit the record for further review. Often a number of querying rounds are required.
Objectives: To implement processes which improve the usability and efficiency of the ANZCTR registration and updating procedures, without compromising quality and completeness.
Methods: ANZCTR administrative and Information Technology (IT) staff devised new logic rules to increase automation when completing and updating the registration form. For example, if registrants selected that their study was 'Not yet recruiting', they were not able to enter any data in the 'Date of first participant enrolment' field. We compared querying patterns for a period prior to, and following, implementation of the new logic rules in order to evaluate their effectiveness.
Results: Since implementation of the new logic rules on 4 October 2016, there has been a decrease in the amount of querying required by staff, particularly for update submissions. From January to September 2016 (the pre-logic rules period), an average of 55% of submitted updates required at least one round of querying by staff. From October 2016 to January 2017 (the post-logic rules period), this proportion decreased to 38% (see Figure).
Conclusions: Implementation of logic rules within the ANZCTR registration and updating process was effective in reducing the amount of querying required by staff, thereby improving efficiency for users.

Attachments: Figure 1.pdf

4074
Measuring the impact of a laboratory practice guideline on immunohistochemical assay validation: Results from multiple modalities

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Background: The College of American Pathologists (CAP) launched the Pathology and Laboratory Quality Center in 2010 to develop and implement laboratory practice guidelines (LPGs). Twelve LPGs have been published. In 2013, CAP was awarded a 5-year cooperative agreement from the United States Centers for Disease Control and Prevention to increase the effectiveness of LPGs.
Objectives: To assess the awareness, adoption and impact of a CAP LPG published in 2014 in comparison to baseline data from 2010.
Methods: A baseline survey on immunohistochemical (IHC) assay-validation practices had been conducted in 2010. Subsequently, an LPG addressing the gaps in practice was published in 2014. In 2015, a follow-up study consisting of three different evaluation modalities (a questionnaire, telephone interviews and focus group sessions) was conducted on CAP and non-CAP laboratories to determine the impact of the LPG and inform future updates.
Results: A total of 1624 (out of 3512 distributed) questionnaires, 40 (out of 231 attempted) telephone interviews and 5 (out of 24 invited) focus group responses were analysed. All modalities indicated the majority of respondents were aware of the LPG and had adopted most or all of recommendations. The questionnaire demonstrated that a significantly higher percentage of laboratories had written procedures for IHC validation ($p<0.001$) and performance of pre-testing validation ($p<0.001$) compared to the 2010 survey. Barriers to adoption were reported as additional time and expense required for some IHC validations, and scarcity of rare antigens for validation testing. Respondents also desired more practical examples and specificity on antibody and assay usage.
Conclusions: While development of LPGs requires significant resources, active data collection to identify gaps and

demonstrate adoption ultimately leads to improving patient care. With experience, CAP has been able to develop multiple tools to aid in the development and improve the implementation of the guidelines.

4075

Barriers and facilitators to implementing evidence in African healthcare: A content analysis

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Background: Within every clinical setting, various challenges are experienced in implementing evidence into practice. However, low and lower-middle income countries have unique healthcare features that may further add complexity to implementation efforts. It is therefore important to understand the barriers and facilitators specific to their context so that targeted strategies can be incorporated in the implementation plan.
Objectives: The objective of this study was to determine the barriers and facilitators to evidence implementation in Africa across various health settings. Barriers and facilitators that cut across or vary between countries and settings were also identified.
Methods: Twenty published and unpublished reports of implementation projects undertaken by the Joanna Briggs Institute's clinical fellows from seven countries in Africa were reviewed. Clinical fellows consisted of health practitioners from different disciplines including dentistry, pharmacy, nursing and medicine. Data on barriers and facilitators were extracted and analysed using content analysis.
Results: Barriers at the health system and practitioner levels were identified including inadequate physical structure, equipment and resources, lack of policies to support best practice, high workload, lack of training and access to evidence-based information, and lack of knowledge and skills relevant to evidence-based practice. There was a high degree of similarity across countries and settings in terms of the identified barriers. Positive staff attitude and knowledge about best practice were the most common facilitators described in the implementation reports.
Conclusions: The findings of this study are useful not only in providing guidance to the assessment of barriers and enablers but also for mapping strategies that can be introduced in clinical settings in Africa. Effective and sustainable implementation of best practice in African healthcare settings requires a targeted and multifaceted approach that takes into account both health system issues and practitioner challenges.

4076

Effectiveness of physical activity interventions with healthy older women: A systematic review

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Background: Physical activity is beneficial for health, yet, there is limited research on the benefits of physical activity on the health of older women.
Objectives: This review was undertaken to assess the effectiveness of physical activity interventions on the physical health outcomes of healthy older women living independently in the community: to systematically review randomised-controlled studies of physical activity interventions designed to improve the physical health of healthy older women living independently in the community; to consider the effectiveness of physical activity interventions for older women on their physical health outcomes, including physical fitness; and, to identify implications for policy and practice to promote physical activity in older women.
Methods: Five major databases were searched for English studies published between 2000-2016, as well as six additional portals for unpublished studies. Studies included women age 50 years or older living independently in the community. Excluded were studies targeting women with specific conditions such as arthritis and heart disease. Standardised tools and processes developed by the Joanna Briggs Institute guided the review. Initially we

reviewed 563 articles of which 9 remained for the final review and synthesis.
Results: All included studies used a randomised-controlled trial methodology that tested a physical activity intervention. Various positive health outcomes were reported that could be attributed to the interventions including improved strength, enhanced balance and self-confidence, fewer reported falls, improved bone density and reduced risk of fractures, increased speed of activities, and favourable physiological parameters. There was lack of consistency across types of interventions, settings, and outcome measures thus a narrative review was conducted.
Conclusions: A range of physical activity interventions benefit older women's health. Future research should be designed to attend to focus the number and types of variables studied.

4077
Do intellectual relationships create conflicts of interest?

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Background: Studies that investigated whether conflicts of interest (COI) introduce bias have focused on financial COIs. Whether intellectual COIs influence judgment is unknown.
Objectives: We hypothesise that an intellectual relationship is associated with inferences from bodies of evidence. To test this hypothesis, we will study the association between trial authors' best guess of the true effect size of a specific intervention, and the effect size to which they might be attached, i.e. the one reported in their trial.
Methods: A cross-sectional study of a random sample of Cochrane and non-Cochrane clinical systematic reviews published in 2015. Eligible reviews included a meta-analysis of a dichotomous outcome, including at least three randomised-controlled trials, and showing a substantial level of heterogeneity. We included the first three and last two trial authors of the trials contributing to the primary meta-analysis of the 'outcome of interest'. We will survey these authors to ask about their best guess for the true effect size. We will run a regression analysis to measure whether the divergence (Δ BestGuess (i)) of trial authors' best guess (EE BestGuess (i)) from the pooled effect estimate (EE Meta-Analysis (i)) is independently associated with the difference (Δ Trial (i)) between their trial's effect size (EE Trial (i)) and the pooled effect estimate (please see Figure 1 below). We will adjust for trial authors' financial COI in the analysis.
Results: We included 36 eligible meta-analyses (included 23 Cochrane reviews and 13 non-Cochrane reviews) that included a total of 236 trials and 885 trial authors. A significant independent association will support the hypothesis that intellectual COI affects judgment. The data-collection phase is under way and we will present results at the Summit.
Conclusions: While there is increasing interest in intellectual COI (e.g, in the setting of clinical practice guidelines development), there is little empirical evidence of its impact on judgment. The findings of our study will contribute to filling this important gap in the literature.

Attachments: MBH GES 2017 Intellectual COI - Figure 1.tiff

4078
Evidence mapping of the decision-making process of a health insurance company in a middle-income country

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Background: New technologies and evidence for management of high-cost pathologies surge daily in order to support clinical decisions at individual and organisational level. A health insurance company in Colombia set up a programme for the use of evidence in decision making with the support of the Clinical Research Institute of the National University of Colombia.
Objectives: To map the evidence that supports the decision-making process of a health insurance company in Colombia.
Methods: Mini-Health technology assessments (m-HTA) were created with standard methods for the following prioritised conditions: breast cancer, arthritis, pulmonary hypertension, Paroxysmal nocturnal hemoglobinuria, diabetes type 2, Transplant, Thromboprophylaxis and Alzheimer's disease. An evidence map was created in order to identify how many systematic reviews were used in the process and the quality of the evidence.
Results: Twenty-three m-HTA were requested. Nineteen m-HTA used published systematic reviews (SR) as a main source of data for the analysis. Eighteen per cent of the requested m-HTA needed to develop systematic reviews de novo due the lack of SR or high-quality SR. Twenty five systematic reviews were used in the programme. Sixteen per cent of them were Cochrane. The quality of the systematic reviews according to the AMSTAR tool was over 7/11. The quality of the overall evidence of all m-HTA was mostly low and moderate. For chronic diseases, the quality was mostly low and moderate; For cancer and Alzheimer's disease, the evidence was moderate quality; For transplant, the evidence was very low quality. We found two requested m-HTA whose PICO question did not use the adequate clinical comparators. The reason was the clinicians were using a high-cost treatment not indicated for the condition.
Conclusions: The m-HTA programme of the health insurance company helped the decision-making process by identifying evidence of efficacy, safety and indications of use that guided the clinicians and the organisation to provide better therapeutic and diagnostic options to patients.

4079

Developing a Handbook to generate evidence-based clinical care protocols in cancer care. Part I. Handbook construction

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Background: Clinical care protocols (CCPs) are detailed instructions about how to do a specific task. CCPs, similar to clinical practice guidelines (CPGs), are intended to standardise clinical attention; however, CCPs statements are mandatory in the local context where they were developed. In cancer care, the need to create CCPs is increasing, especially in low-income countries where the evidence must be adjusted to the local circumstances.
Objectives: To create a handbook about how to develop evidence-based CCPs, using a systematic approach.
Methods: Once the scope and objectives were defined, we made a systematic search in electronic databases, CPGs developers' websites, and others. As inclusion criteria, the document must have established the steps required to make CCPs and must have defined CCPs as "detailed instructions about how to do a specific health care activity". Two team members made the selection, extraction, and quality assessment independently, and the discrepancies were resolved through discussion. In case that there was a CCP development step without high-quality evidence, the step details were obtained through CPGs methods adaptation; and, in absence of evidence, the team made a systematic review followed by a RAND/UCLA consensus.
Results: The search detected 6425 records. After the selection process, 15 documents were included; 53% were reported in Spanish and 40% were handbooks. The global quality was intermediate. The CCPs making steps were similar to CPGs; nonetheless, the CCPs manuals made more emphasis on instructions about how to generate clinical management flowcharts and how to report them than CPGs manuals. Although the CCPs are CPGs implementation tools, there was a lack of evidence about how to do CCPs implementation. The quality report was

poor in topics related to how to elaborate the CCPs questions, and how to include the evidence. Our handbook included 15 steps and is currently being validated.
Conclusions: CCPs has similar steps with CPGs making. Even though there is scarce information about how to include the evidence and how to do their local implementation, CCPs seems to be a useful tool to standardise cancer care.

4080
Developing a Handbook for Developing Clinical Care Protocols in Cancer Management. Part II: Steps for Protocol Elaboration. A systematic review.

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Background: Clinical care protocols (CCPs) are similar to clinical practice guidelines (CPGs); however, there is not enough information about how to develop CCPs for improving quality of care in cancer. Therefore, it is required to determine the necessary steps for its elaboration as well as how they differ from CPGs development. Objective: To establish the necessary steps for systematic development of CCPs.
Methods: A systematic search was performed in order to find the documents related to the development of CCPs using the following sources: CPGs developers´ websites, electronic databases, Google and Google scholar without date restriction. The documents must have established the steps required to make CCPs and must have defined CCPs as “detailed instructions about how to do a specific health care activity” for inclusion. The quality tool was developed by the researchers in a concerted way. Finally, two independent reviewers made the selection, extraction, and quality assessment of the evidence. Discrepancies were resolved through discussion.
Results: We found 6425 documents, 15 of them were eligible but we included 13 of these which described 11 methodologies. Retrieved documents were developed from 1996 to 2013 and their global quality was intermediate. We found that the necessary steps for protocol development were: prioritisation of topics; definition of scope and objectives; evidence search, selection, appraisal and synthesis; elaboration of flowcharts; writing the report; and, CCPs implementation and update. Noteworthy, there was scarcity of knowledge about CCP’s question formulation, evidence contextualisation and CCPs implementation. In addition, CCPs documents differed form CPG in that CCPs focused on flowchart making and report standardisation.
Conclusions: CCPs steps are similar to CPGs development, but the CCPs documents have less-detailed information than CPG’s handbooks. Our findings highlight not only the need to create a more-detailed CCPs handbook but also to validate strategies to contextualise evidence and implement CCPs indications, especially in cancer management.

Attachments: CCP's steps flowchart.pdf, Prisma flowchart.pdf

4081
A framework to promote evidence use

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Background: The expectations of what evidence produces and why has shifted over the last years. The use of evidence increasingly matters to clients in the international-development sector seeking value of money for their investment and expecting more explicit 'impact' and 'uptake' strategies. As part of our search for innovative tools, OPM is testing a framework from Langer et al. (2016) to plan, and monitor uptake strategies.
Objectives: The presentation will describe the framework and its use as a tool to plan and monitor strategies to promote use of evidence and highlight practical examples and best practices and OPM's experience about the

mechanisms. The poster aims to share thoughts on the usefulness of this framework and on participants' experiences on effective strategies to promote use. Format: The poster will start by presenting the framework and the six mechanisms. For each mechanism,OPM's experience with planning and implementing different strategies will be presented and a discussion subsequently facilitated on participants' experience, knowledge and challenges around them.
Conclusions: Participants will assess the usefulness of adopting and promoting a framework to support the planning, implementation and monitoring of evidence uptake strategies in their institutions/project. The poster will help building collective knowledge about what works and what doesn't by contributing to the development of best practices around the mechanisms identified by the framework.

4082

Growing the evidence base to advance respectful maternity care: How effective implementation science partnerships can move evidence into action

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Background: Emerging evidence indicates women who give birth in health facilities face humiliating and undignified conditions. Mistreatment can lead to avoidance and delays in seeking maternity care and can contribute to poor health outcomes. There is little evidence around how to measure mistreatment, implement approaches to mitigate it, and translate these findings into action.
Objectives: The objectives of three studies from East Africa were to: 1) measure prevalence of mistreatment reported by women post facility-based childbirth; 2) use qualitative methods to understand the drivers of disrespect and abuse; 3) based on the baseline findings, develop interventions to address mistreatment related to childbirth in health facilities; 4) determine the effectiveness of the intervention packages; and, 5) work to translate evidence into policy and practice.
Methods: The three studies (2 from Tanzania and 1 from Kenya) used quazi-experimental mixed-methods designs. Data included qualitative and quantitative base-line and end-line data, and intervention-implementation data to investigate how and why interventions were effective. Development partners provided 'research-to-use' capacity development and support throughout the process.
Results: Roughly 15-20% of study participants reported mistreatment; drivers ranged from socio-cultural, health system and individual factors. Multi-level, multi-component approaches with consultative processes are best positioned to promote respectful care and reduce mistreatment. Uptake of findings into national policy and programmes was facilitated by strategic stakeholder engagement and additional knowledge translation support. Conclusion: Action is required at all levels to mitigate the mistreatment of women during childbirth. Countries like Tanzania and Kenya are examples of how implementation research findings can inform policies and programmes to advance respectful care. These examples underscore how implementation science partnerships with the appropriate mix of research, policy, advocacy and translation expertise have greater potential to disseminate and implement evidence.

4083

Building a nationwide online platform for evidence-based information in primary healthcare in Belgium

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Background: Since 2011 EBMPracticeNet has been the Belgian electronic point-of-care information platform. The aim of the platform is to optimise quality of care by promoting evidence-based decision making. To date, the target users are the general practitioners (GPs), offering 72 national guidelines, 938 EBM Guidelines of Duodecim Medical Publications (translated from English into Dutch and French), 4552 evidence summaries, 661 links to other types of evidence-based information and 608 national patient leaflets. All this information is linked since 2012 to electronic health records through a tool called the Evidence Linker. In 2016, the Belgian Federal Public Service of Health assigned a grant to EBMPracticeNet in order to extend the target group of evidence users.
Objectives: The objective of this project is to set up a stepwise approach to disseminate evidence-based information among nurses, physiotherapists, speech therapists, occupational therapists and pharmacists.
Methods: Five work packages were identified: 1) an analysis of the specific needs for the use of evidence-based information at the point of care for each healthcare provider group; 2) an inventory of the available evidence-based information (national and international); 3) the development of a dissemination model adapted to the former findings; 4) a new web design of the platform, both front end and back end; and, 5) the development of a promotion strategy for the new platform with possible parallel dissemination strategies.
Results: This project will result in a freely accessible, nationwide online platform for the dissemination of evidence-based information for six health and care professions in Belgium, by the end of 2017. The objective is to link evidence to electronic health records through the Evidence Linker. Multidisciplinary collaboration will be stimulated trough this common platform.
Conclusions: Building a nationwide online platform for evidence-based information in primary healthcare in Belgium is a unique project that can inspire other countries that face a similar challenge, i.e. the facilitation of implementing evidence among various target groups of professionals.

4084

Measuring the patient safety culture in a pharmacy setting in China

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Background: As pharmacies continually strive to improve safety and quality, there is growing recognition of the importance of establishing a culture of patient safety.
Objectives: This study explores the attitudes and perceptions of patient safety culture for pharmacy workers in China by using a Pharmacy Survey on Patient Safety Culture (PSPSC) questionnaire and comparing it with the psychometric properties of an adapted translation of the PSPSC in Chinese hospital pharmacies with that of the US.
Methods:: We used the modified PSPSC questionnaire to measure 11 dimensions of patient safety culture from 16 hospital pharmacies in one of the cities, southwest part of China. The questionnaire included 527 Chinese pharmacy workers which consisted of 223 pharmacists and 134 assistant pharmacists. We used SPSS 17.0 and Microsoft Excel 2007 to conduct the statistical analysis on survey data including descriptive statistics and validity and reliability of survey. All data were input and checked by two investigators independently.
Results:A total of 630 questionnaires were distributed of which 527 were responded validly (response rate 84 %). The positive response rate for each item ranged from 37% to 90%. The positive response rate on 3 dimensions (Teamwork , Staff Training and Skills and Staffing, Work Pressure, and Pace) was higher than that of AHRQ data ($P<0.05$).There was a statistical difference on the perception of patient safety culture in groups of different hospital levers, sex, and qualification levels. The internal consistency of the total survey was comparatively

satisfied (Cronbach's α=0.89).
Conclusions: The results show that among the pharmacy workers surveyed in China there was a positive attitude towards the patient safety culture within their organisations. The differences between China and the US in patient safety culture suggests that cultural uniqueness should be taken into consideration whenever safety culture measurement tools are applied in different cultural settings.

4085

Interventions to reduce or stop inappropriate drug prescription: An overview of systematic reviews

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Background: Previous studies showed that the existence of evidence-based guidelines does not necessarily lead to adherence by healthcare professionals. Up to 30% of patients receive inappropriate care which can be damaging and should be avoided. Thus, it is crucial to implement guidelines with 'do-not-do' recommendations more effectively in clinical care. Although many interventions exist for implementing recommended (pharmacological) care, it is unknown which interventions are effective in reducing unnecessary prescriptions or de-implementation.
Objectives: To perform an overview of systematic reviews (SRs) to identify which interventions reduce inappropriate drug prescribing.
Methods: Embase and MEDLINE were searched in June 2015 (update ongoing). We included SRs focused on interventions to reduce inappropriate prescribing. Risk of bias of SRs was assessed using AMSTAR. SRs were mapped into domains of the Cochrane Effective Practice and Organization of Care (EPOC) taxonomy.
Results: Our search yielded 3106 SRs – 25 SRs were included. SR risk of bias was moderate in 21 SRs and low in 4 SRs. SRs included 5-89 original studies each. Patients of all ages and in all settings were included. Intervention strategies covered all domains of the EPOC taxonomy: professional interventions were evaluated in 16/25 SRs, financial interventions in 5/25 SRs, organisational interventions in 19/25 SRs and regulatory interventions in 1 SR. For 1 professional (prescription advice based on diagnostic testing) and 2 organisational interventions (multifaceted intervention, quality monitoring) (5%) we found sufficient evidence to conclude these were effective in reducing inappropriate prescribing. For 8 interventions (14%) some evidence for their effectiveness was found, for 12 (21%) insufficient evidence and for 33 (58%) no SRs were found.
Conclusions: Our results suggest that only a small number of interventions may be effective in reducing inappropriate prescribing. For the majority of interventions mentioned in the EPOC taxonomy no aggregated evidence for their effectiveness was found. More evidence focused on interventions to reduce inappropriate prescribing is needed.

4086

Experiences with methodological requirements for guideline-based performance measures and their practical application. Evidence Map and protocol for a qualitative study.

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Background: Implementation of clinical practice guidelines by means of guideline-based performance measures (GBPM) are subjects of current research. No methodological gold standard exists and the approaches are heterogeneous (1). Members of G-I-N reported that the procedure could be more rigorous (2). In 2016, international reporting standards for GBPM were published (3). To our knowledge, there has been no systematic analysis on how methodological and organisational factors affect the use of methodology to develop GBPM from the perspective of guidelines developers, methodologists and users.
Objectives: To search and analyse international qualitative research about barriers and facilitators for GBPM development.
Methods: We developed a search strategy to identify qualitative studies published in English or German reporting on barriers/facilitators affecting GBPM development. A search in MEDLINE covering 1998 to 1/2017 retrieved 2211 hits. Titles and abstracts were screened by one reviewer using pre-specified inclusion criteria. After title and abstract screening 30 articles were identified as potentially relevant. Full texts were screened by two independent reviewers. No study fully met the inclusion criteria. The studies were compiled into an Evidence Map (EM).
Results: Most studies (n=17) targeted guideline implementation and use without reference to GBPM. Seven studies addressed GBPM but not a qualitative analysis of barriers/facilitators. GBPM development process (n=7). Six studies focused on use and requirements of PM but did not report processes of GBPM development.
Conclusions: The EM showed a need for qualitative research with a focus on GBPM development. An international qualitative study consisting of at least 15 semistructured telephone interviews with PM developers, methodologists and users identified through G-I-N will be conducted as part of a national research project. Criterion sampling will be used for the recruitment of participants. The study will focus on processes and experiences with development and quality assessment of GBPM. The interview guide and first results will be presented at the Summit.

4087

How do German guideline-based performance measures in oncology contribute to evidence-based, patient-centred care?

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Background: The German Guideline Programme in Oncology, a joint initiative between the German Cancer Society, the Association of the Scientific Medical Societies in Germany and German Cancer Aid, supports the development of high-quality guidelines. To enhance implementation and evaluation, the suggestion of performance measures (PMs) derived from guideline recommendations is obligatory. PM teams are convened representing the multidisciplinary guideline development groups including clinical experts, methodologists and patient representatives as well as the organisations that take an active part in and share responsibility for documentation and quality improvement, i.e. clinical cancer registries and certified cancer centres. A standardised development process with 5 selection criteria i.a. relevance and clarity of definition is used.
Objectives: To review German guideline based PM in oncology and to evaluate potential for improvement concerning development process and reporting as part of a national research project.
Methods: Completing an earlier work (1), we extracted PM of 16 current guidelines (as to 8/16) and analysed them according to reporting criteria published 2016 (2) including i.a. development process, level of evidence (LoE) and measure appraisal. We further quantified and analysed outcome measures.
Results: Of 155 PM (7-13 per guideline), 144 were derived from strong recommendations,11 were based on other sources. 81 PM were classified as evidence based (46 x LoE 1). 74 PM were consensus based, mainly covering diagnostic interventions, with 17 PM citing literature not formally assessed. No psychometric test results (validity, reliability) or information on piloting were available. Of 11 PM measuring outcomes, 2 addressed patient reported outcomes and 2 used an international agreed definition.

Conclusions: The standardised process of PM development in oncology results in a high number of consensus based process PM. This shows the need for well justified recommendations. Examples will be presented. Piloting and validating of PM and the development of internationally agreed outcome PM were identified as further fields of improvement.

Attachments: 170315_Abstract_Literature.pdf

4088

Partnering with media practitioners to disseminate high-quality research evidence

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Background: The media roundtable is a collaboration between the Nigerian Union of Journalists (NUJ) and Cochrane Nigeria to share 'breaking news' evidence from Cochrane Reviews with media practitioners.
Objectives: • promote evidence-based healt care reporting among Nigerian media practitioners; • disseminate up-to-date, relevant and evidence-based healthcare information from systematic reviews to the Nigerian public through the media; and, • enlighten reporters about evidence-based healthcare.
Methods: The initiative, which began in 2012, consists of short presentations and discussions held 1-2 times a year on topical Cochrane reviews and dissemination of Cochrane Wiley press releases to media practitioners monthly. We have had seven media roundtable events and disseminated more than 45 press releases. Below are the outcomes of a cross section of these programmes.
Results: 23 July 2013, Impact of Salt Reduction on Hypertension , worms in children: 13 participants from 9 National, 1 TV station and 1 radio station) –2 Newspaper articles 21 October 2014, Pneumonia and vaccines for Pneumonia; 15 participants (2 local,12 National newspapers, 1 radio and 1 television) 6 newspaper articles and 1 radio programme, 12 January 2016, Chronic kidney disease: 20 participant: (2 local, 12 National, 2 television stations and 1 radio station) 8 newspaper article and 1 Television broadcast.
Conclusions: The media roundtables have led to dissemination of Cochrane reviews to the general public. In addition, participants have reported that the presentations have improved their knowledge. However, one of the participants said that they would like us to handle peculiar problems facing Nigerians such as the use of herbal medicines.

4089

How connected is Academia? Using Social Network Analysis as a tool to map decision-maker engagement and policy influence

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Background: Relationships between academic faculty and decision makers have been documented as an important factor in the evidence-to policy process. However, knowledge about the breadth, depth and quality of these relationships often remains unknown therefore rendering the potential for influence untapped, inefficient, uncoordinated or redundant.
Objectives: The purpose of this study was to explore Social Network Analysis (SNA) as a means to map and understand the size, breadth, depth and variety of city, state, federal and global government networks held by faculty at The Johns Hopkins Bloomberg School of Public Health (JHSPH), USA.
Methods: Between May 2016 and December 2016, 211 (32%) of 651 eligible full-time faculty across all 10 departments at JHSPH participated in a sociometric survey. The survey elicited faculty relationships with decision-makers at the various government levels. SNA permitted mapping of networks using UCINet. Descriptive

data and tests of association were conducted in STATA.
Results: Preliminary results indicate significant depth as well as breadth of faculty relationships with networks across over 100 government departments at city, state, national, and international levels, close to 700 individual decision makers, and 45 country governments. These varied by department as well as by government level. Factors affecting the size, breadth and depth of networks included: structural (faculty roles and positions), professional (research expertise, approach), and experiential (practice-based environments) amongst others.
Conclusions: Mapping relationships using SNA is a useful first step to understand the depth and breadth of networks of academic faculty with decision makers. It provides some insight with respect to an institution's overall potential to influence and impact policy and practice. Where networks are dense, the opportunities to have influence is likely greater and sustained. Where there are gaps in the network, institutions such as JHSPH can be strategic about building relationships that may lead to policy influence.

4090

Implementing evidence-based laboratory order sets within a CPOE in primary care in Belgium: A cluster RCT

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Background: Laboratory test ordering is one of the most important clinical acts performed by family physicians. One in three laboratory test orders has been shown to be inappropriate. Inappropriate laboratory tests result in a waste of resources and are potentially harmful. False-positive tests and coincidental findings may result in unnecessary 'downstream' diagnostic testing or treatments.
Objectives: To evaluate the effect of evidence-based order sets on quantity and quality of laboratory test ordering in primary care.
Methods: The intervention of this cluster randomised-controlled trial (RCT) is a form of decision support consisting of order sets derived from national evidence-based recommendations as formulated by the Flemish College of General Practitioners. These order sets will be integrated within an online computerised physician order entry (CPOE) linked to every electronic health record in Belgium (EHR). After recruitment, primary care practices will be randomised to an intervention or control arm. The primary outcome of interest is the number and proportion of appropriate tests in both groups. Additionally, we will investigate the effects of the orders sets on diagnostic error, 'downstream' activities and laboratory test volume. Collecting data will be done nationwide according to novel standards with healthdata.be.
Results: Preliminary results will be presented.
Conclusions: Several studies have shown promising effects of decision support on volume of laboratory tests, but limited information exists. Our study is designed to collect data allowing us to evaluate not only test volume but also test appropriateness. No studies have been conducted evaluating the effect of decision support of diagnostic error. Our study will contribute important information on this subject.

4091

'Teenevidence': Evidence for Young People for Our Topics and Our Style

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Background: My school is a typical boarding school in Cameroon. In Cameroon, boarding schools are sometimes mixed, sometimes single-sex but they are similar in several ways especially with respect to foods allowed or

banned in school, exercise curriculum and other health aspects. Some foodstuffs have been banned with little or no evidence that they are unhealthy. School administration base their judgements on foods or exercise on experience or personal inclinations. Sports is often limited to one hour per week and the lifestyle is sedentary. Available research evidence relevant to youth is not catchy or is boring to young people.
Objectives: Identify evidence for banned or approved foods at boarding schools in Cameroon; assess accessibility of evidence to youths in school.
Methods: We made a list of approved and banned foodstuffs. We worked with a health expert and searched evidence databases including the Cochrane Library, the Campbell Collaboration, 3ie, the Joanna Briggs Library and Google scholar. Using a Microsoft Word form, we collected evidence on each food item identifying evidence of benefits, harms, and safety. We also searched evidence on exercise for youths in boarding school where movement is limited.Due to the difficulty in finding evidence, we developed a questionnaire for young people on approaches of disseminating evidence that was most appropriate for them. We searched for outlets that provided or disseminated evidence with these approaches.
Results: Regular evidence databases were not youth friendly with the database navigation being complicated. Searching the worldwideweb provided some evidence related nutrition, exercise that is useful to young people and presented in a youth friendly manner by James McCormarck. We identified 18 songs with evidence relevant to our context; 4 nutrition slots, 2 exercise slots out of 18, with 7 out of 18 songs being trendy youths songs. Local foods were not covered, but recommendations broadly covered healthy diets.
Conclusions: A trendy, youth-friendly approach should be employed when disseminating evidence relevant to youths using the McCormarck approach. This can be applied to sexual health topics.

4092
Impact evaluation of the Nigerian Institute for Peace and Conflict Resolution, 2000-2014

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Background: Nigeria is infamous for violent conflict which has retarded it growth and development. Deep socio-political divisions and sharp differences have been blamed for the insecurity. Gaining democratic governance in 1999, a new commitment was forged to promote peace and development. The Olusegun Obasanjo administration established the Institute for Peace and Conflict Resolution (IPCR) in 2000 with the mandate to carry out research into the causes of violent conflict and to promote peacebuilding and conflict prevention. From its outcomes, it is expected to offer the government with relevant policy and practice options.
Objectives: To uncover the kinds of conflict IPCR was designed and implemented for, and understand its programme impact. To explore opportunities and emerging best practices in peacebuilding and draw out lessons for other African nations.
Methods: The study conducted desktop reviews of literature, programme records and reports, past evaluations and surveys were conducted. A mixed method of qualitative and quantitative research was adopted to gather, analyse and report interview and survey data.
Results: IPCR had demonstrated institutional strength in programme planning and management. Corruption, impunity, human rights abuses, indiscipline and intolerance are driving cycles of violence in Nigeria There was strong evidence to suggest IPCR's contribution to peace was in a short-term. 80% of respondents was of the view that IPCR has to scale up its programmes and be supported to make impact in a long-term. Need to trickle down peacebuilding gains and integrate community networks. Theories of change should be implicitly drawn into its programme logic models. African countries should institutionalise peace building to countering violent extremism of any form.
Conclusions: Taking the evidence into account, IPCR has contributed to the promotion of peace building in Nigeria. However, to offer relevant policy recommendations and effectively reduce the spate of conflict in Nigeria, IPCR must deepen and expand its intervention to include the community stakeholders and be transformed into a Peace Commission.

Attachments: GES Charts Table 1.pdf

4093

Registry of medical and technological documents as a database of evidence-based medicine in Ukraine (Registry of MTD)

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Background: Currently, the healthcare system of Ukraine is well on the way towards new changes, the creation of new system of medical care standardisation based on unified methodology of devevelopment of clinical guidelines and clinical protocols.
Objectives: In order to ensure the development and implementation of medical and technological documents, the transparency of their development and to provide unified information environment for members of the working groups, specialists and patients the Registry of MTD was created. It serves as a platform for the work and cooperation of different stakeholders, including developers of local protocols, healthcare workers and patients, managers of health institutions, scientists and public sector.
Methods: The Registry of MTD was developed in early 2013 by the employees of the Medical Care Standardization Board on the basis of html platform. Its content is regularly updated in three languages – Ukrainian, Russian and English, which makes it a useful tool for the maintenance and general access to medical and technological documents for users in Ukraine and abroad.
Results: The Registry of MTD is the first such resource of evidence-based medicine for specialists and patients in Ukraine. As of February 2017, the Registry of MTD contained 123 unified clinical protocols of medical care, 5 standards of medical care and 93 adapted clinical guidelines, developed in accordance with the new methodology. It also contains different regulatory and methodology documents, presentations, publications, international resources, and links to various useful web sites. An important part of the registry concerns topics under development. It contains information about the schedule of working groups meetings and public discussion of the documents, which enables the participation of all stakeholders in the development of guidelines and protocols.
Conclusions: Today the Registry of MTD serves as an evidence-based medicine database. In the near future, it will be empowered by searching and filtration tools, data-analysis instruments, subscription options, options of reporting to the Ministry of Health of Ukraine and so on.

4094

Implementation of modern medical knowledge in management of patients with hepatitis B in Ukraine

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Background: There was a need of modern approaches to the management of patients with hepatitis B (HBV).
Objectives: Improving the quality of care at all levels and co-ordination between family physicians and specialists (infectiologist and gastroenterologists).
Methods: A multidisciplinary working group performed a systematic search of clinical guidelines on a management of patients with HBV. Guidelines were assessed by AGREE II. Each of the guidelines, which were taken as the prototypes were critically assessed and adapted to the national context. Two adapted clinical guidelines (for adults and children), based on strategies of evidence-based medicine, were developed. In 2016, medical standards, i.e. unified clinical protocols, have been created, and based on the recommendations of clinical guidelines.
Results: Modern evidence on effective methods of diagnosis and treatment of patients with HBV have been included in adapted clinical guidelines. Relevant unified clinical protocols on provision for minimum acceptable

quality of primary and specialised medical care have been developed. These medical and technical documents are available in the Registry of medical and technological documents on medical care standardisation (http://mtd.dec.gov.ua). Local protocols and clinical pathways, tailored to the resources of health care institutions, are being created.
Conclusions: The methodological approach to the creation of modern medical and technological documents in Ukraine allow, adapting international medical standards and creating effective tools for the management of patients with the specific diseases. Well-coordinated work of healthcare institutions at different levels would save resources and improve healthcare.

4095

Artemesinin-based combination therapy for uncomplicated Malaria management among children under-5 in Cameroon: A best-practice implementation project

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Background: The burden of disease attributable to malaria has significantly improved in the last 3 years, however, the morbidity and mortality risks are still present, especially so for children under five years of age. In children with uncomplicated P. falciparum malaria, there is strong evidence to suggest that the following artemisinin-based combination therapy (ACTs) are effective in treating malaria. WHO malaria treatment guidelines 2015 have strong recommendations with high-quality evidence guiding practice in the 'test, treat and track' approach using microscopy, rapid diagnostics tests and ACTs.
Objectives: The aim of this evidence implementation project is to make contribution to promoting evidence-based practice in artemisinin-based combination therapy for managing uncomplicated malaria in children less than 5 years old and thereby improve patient outcomes and resource utilisation in the Bali Health District.
Methods: This evidence-implementation project used the JBI Practical Application of Clinical Evidence System (PACES) and Getting Research into Practice (GRiP) audit and feedback tool. The PACES and GRiP framework for promoting evidence-based healthcare involved three phases of activity: Phase 1: Stakeholder engagement and baseline audit data collection with identification of barriers to implementation. Phase 2: Design and implementation of strategies to improve practice through Getting Research into Practice. Phase 3: Phase 3: Follow-up audit post implementation of change strategy.
Results: We compared compliance with best-practice recommendations at baseline against a follow up compliance at 4 months following implementation of strategies identified using JBI GRiP Matrix. Compliance rates improved overall by 31% (R: 20 – 42) for all criteria and all sites with differences noticed between sites We identified a total of 19 barriers and these could be stratified into clinician, community health workers', patients' and policy maker related barriers.
Conclusions: Despite existing barriers to evidence implementation, getting research into practice is possible and does improve quality of care.

4096

Evidence implementation in low- and middle-income countries through the JBI Clinical Fellowship Program

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Background: Research evidence is becoming available to different settings, including low- and middle-income countries (LMIC). However, getting research evidence into practice still remains a challenge. LMIC settings are quite challenging to conduct research and to translate the evidence mostly due to access, capacity and cost.
Objectives: The main goal of this study is to analyse the barriers and coping strategies while getting research into practice in LMIC.
Methods:10 clinical fellows were recruited from 6 LMICs between January and November 2016 by the Joanna Briggs Institute Clinical Fellowship Program. They were trained on JBI Practical Application of Evidence System (PACES) and the Getting Research into Practice (GRiP) frameworks. Data were extracted from the implementation reports of each fellow and were analysed.
Results: Ten projects were completed in 8 LMIC countries in Africa and Asia including the Middle East. The projects included 4 communicable diseases (Malaria, Tuberculosis, UTI, Chronic Rhinosinusitis), 2 non-communicable diseases (Diabetes, Cancers), 2 traumatic conditions (Burns and Spinal Cord Injury) and 1 practice and organisation of care (Neonatal resuscitation). Forty-nine barriers to best practice were identified, with some being common.Two behaviour-change techniques were used and twenty health outcomes were improved. Overall compliance with best practice improved from 31% (R: 0-71) to 90% (R: 64-100).
Conclusions: The JBI PACES and GRiP approach is effective in getting research into practice in LMICs and therefore promotes the use of evidence to improve standard of care and treatment.

4097
Rehabilitation in Africa - Building capacity in clinical practice guidelines development and use

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Background: One billion of the world's population have some form of disability which require rehabilitation or assistive technology. These numbers are steadily increasing as chronic diseases and injuries are becoming more prevalent. In Africa, there are millions people with disability without any access or quality rehabilitation. Rehabilitation must ideally be delivered with an evidence-based framework and this requires capacity development. We explored the perspectives of stakeholder on how to build capacity in evidence-based rehabilitation guidelines within an African context.
Methods: We used a qualitative approach and conducted semi-structured interviews with key informants, using semi-structured questions. Saturation was identified when no new information for any question was provided in the penultimate or final interviews obtained from individuals in any of the informant clusters. All interviews were audiotaped and then independently transcribed. For structured content analysis, all transcripts were transferred into a data bundle in Atlas.ti. We established reliability in theme identification between two of the researcher using randomly-selected interviews.
Results: The key themes which emerged from the data include readiness to take up CPG development and implementation, clinical practice guideline skills development, user-friendly format and accessibility of rehabilitation CPGs and strategies to collaborate and pool resources for CPG capacity building in rehabilitation in Africa. Conclusion: The WHO has identified rehabilitation as a key health strategy for the 21st century and a human right for those who need it. Our findings provide a framework to build capacity in evidence-based clinical practice guidelines which should be recognised by key stakeholders and operationalised to impact rehabilitation in Africa.

4098

Embedding evidence-based policing: The benefits and challenges of police and academic partnerships

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Background: In its Policing Vision 2025, the UK's National Police Chiefs' Council (NPCC) states that by 2025, evidence-based practice will be embedded in, and will inform every day policing practice. Establishing a framework which helps practitioners across policing contribute towards building knowledge and standards based on evidence is recognised as vital to achieving this end. Findings: The College of Policing's work to understand best practice in policing and develop an evidence base of what works in reducing crime has highlighted the benefits of productive partnerships between forces and academic institutions. This presentation will describe learning from the College of Policing's Police Knowledge Fund (PKF), a joint £10m initiative with the Higher Education Funding Council for England (HEFCE) and the Home Office that funded 14 collaborations between academia and police forces with the aim of increasing evidence-based practice. Key findings from the evaluation of the programme will be outlined, describing learning against the PKF's three main aims, which were to: • build sustained capability amongst officers and staff to understand, critique and use research, including the potential for officers and staff to carry out research and reviews of the evidence; • embed or accelerate understanding of crime and policing issues, and evidence-based problem-solving approaches; and, • demonstrate innovation in building the research evidence base and applying it through knowledge exchange and translation across all levels of policing. Conclusion: The presentation will conclude with a series of considerations required to maximise the benefits and sustainability of the current PKF programme, and to increase the success of future police and academic collaborations. With the ultimate pursuit of improved police performance and practice, key learning around the development of evidence-based practice through police/academic collaborations is likely to be of considerable interest across the global policing family.

4099

Decision making about healthcare-related tests and diagnostic strategies: A framework provides guidance for when research providing test-accuracy information is sufficient

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Background: Decisions about tests and diagnostic strategies are more challenging to make than therapy ones primarily due to the paucity of direct evidence about patient important benefits and harms of using the test. To make up for this deficit, decision makers often have to link different pieces of evidence and make assumptions about the consequences of using tests on patients and populations. Objective: We provide overarching principles and a conceptual framework for unique considerations when making decisions about tests and when test accuracy results may be sufficient to extrapolate about benefits and harms.
Methods: Using an iterative approach the investigators arrived at overarching principles for making decisions about tests. We applied the framework to examples to illustrate the guidance.

Results: We summarise the overarching principles that guide making decisions about a test. We also present a new framework that guide coverage decision making. In this framework we explain when test accuracy may be sufficient to extrapolate about healthcare benefits and harms which include when there is high or moderate certainty about non-inferiority or superiority of test accuracy for a 'new' test that is intended to replace a test with established link to improving patient outcomes. It also includes when there is high or moderate certainty of evidence that the test accuracy of one test is equivalent or better than the combined accuracy of two tests (one of which is the test evaluated separately). Conclusion: The framework presented in this article should be used when making coverage decisions about tests. We believe this guidance will help determine when decision makers need to fully model the results of tests and their effect on patient important outcomes to assess benefits and harms and when they can make decisions without the need for that step. We also believe the framework guides decisions about covering the test for evidence synthesis purposes.

Attachments: Global Evidence Summit framework tests 08032017.pdf

4100

Knowledge translation needs access to knowledge: DIME – Database of Insurance Medicine Evidence - needs assessment, design, development, user testing, implementation, dissemination

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Background: Evidence-based insurance medicine (IM) facilitates the systematic use of research evidence to inform social and medical decisions in the context of insurance coverage. Despite obvious information needs, access to relevant research is a key barrier that prevents evidence-informed decision-making in IM. Objective: To design and pilot a database for research evidence with a focus on core topics of IM that is straightforward to search, easy to access and relevant to users.
Methods: Our methodology uses 6 steps: a) Identify the user needs; b) Set up a process to identify relevant evidence (search filters, suitable databases, screening, selection criteria); c) Develop a concept for assessing the quality of included studies; d) Develop a concept for indexing; e) Work out a process for feeding the database, including links to Cochrane reviews relevant to IM; and, f) Perform user testing and pilot functionality of the website. EUMASS core activities of IM (sickleave certification, assessment of work disability, return-to-work, assessment of causality, participation, health care utilisation) serve as content framework; we cover assessment instruments and methodological issues.
Results: a) User needs: A heterogeneous spectrum of Swiss and German IM professionals identifed more than 200 PICO questions from their daily work which were analysed according to the EUMASS framework. We used the IM outcomes from Cochrane Insurance Medicine. When presenting the database concept during two international conferences (EUMASS 2016; ICLAM 2016), it was well received and confirmed the perceived gap of access to IM evidence. b) Identify evidence: We used our collection of relevant systematic reviews (n > 100) (insuremed.cochrane.org/evidence) for developing and validating search filters. We developed strategies and the logistics for efficient screening and selection of citations. c) Quality assessment: We identify quality criteria for different study types, pilot them and check for reliability. d) Indexing: First, we determine specific key words and a system for tagging. e) Feeding the database: In collaboration with HIRU, Health Information Research Unit at McMaster Univ.

4101

An effort of evidence-based medicine in Brazil to provide the best healthcare evidence for the community of Portuguese-speaking countries

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Background: In January 2014, Cochrane adopted a strategy of translations with the aim of increasing the ability to translate the contents of systematic reviews from English to other languages. To achieve this goal, Cochrane has been collaborating with affiliated groups in different countries on translation activities. One of these groups was the Evidence-Based Medicine Unit of the Botucatu Medical School (FMB), UNESP, Brazil, registered in the Brazilian National Council for Scientific and Technological Development (CNPq).
Objectives: To make available in the Portuguese language the best healthcare evidence (i.e. Cochrane systematic reviews). The specific objectives were: i) to cover the largest number of volunteers fluent in Portuguese willing to translate the abstracts and plain-language summaries of Cochrane systematic reviews from English to Portuguese; ii) to translate the maximum amount of evidence published by Cochrane; iii) to present the operationalisation of a knowledge platform scheme in Portuguese.
Methods: This was an operational research study. We consider as inclusion criteria the following: a) any health professionals willing to voluntarily participate in this project; b) Portuguese being the official language, regardless whether the collaborator lives in Portuguese- or non-Portuguese speaking countries; c) ability to write in English according to the participant's self-report. The dissemination of this project for the participation of the volunteers occurred during undergraduate, residency and postgraduate courses at the FMB/UNESP; contact with researchers from other universities and research centres; referral through Cochrane Central Executive; and through a specific course entitled 'How to read and understand Cochrane reviews' for graduate programmes at the FMB/UNESP. We used Smartling, a translation software used by Cochrane, with the purpose of facilitating the administration and implementation of the translations. Results and conclusions: Results from this project will be presented during the Summit and analytic issues will be discussed.

4102

Using GRADE to engage healthcare professionals and managers in shared learning and collaborative development and implementation of local guidelines

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Background: Competency-based education and training (CBET) is essential to promote evidence-based practice (EBP). It encompasses knowledge conjoined with skills in communication, collaboration, leadership and health advocacy. GRADE methodology regards knowledge (evidence) as essential, but insufficient to guide decisions and values transparency highly. This may enhance partnerships among those involved in CBET, local managers and healthcare teams.
Objectives: To describe our experience on the use of GRADE to build capacity, enhance networking and promote collaborative EBP dissemination and implementation.
Methods: Professionals from several healthcare institutions from Belo Horizonte, Brazil, attended regular EBP courses and workshops, initially planned as part of medical residents' CBET programme. Participants' efforts to disseminate EBP created a good impression and gained support from hospital directors and municipality

managers. Working groups (WG) were formed to present summaries of findings about specific interventions to multi-professional panels (MPP), using GRADE. Informed by evidence, MPP integrate patients' values and preferences, local context and cost to develop local recommendations and agree on priorities for implementation. Participants will develop a consensus on barriers and facilitators to the initiative using Delphi Technique and will measure changes in clinical practice.
Results: More than 200 participants from 5 hospitals and 9 pre-hospital units from a city with more than 1.5 million inhabitants are involved, including managers, healthcare professionals and medical students. Four WGs use GRADE to disseminate recommendations, in the pursuit of effects to benefit patients. Local protocols are increasingly regarded as a common property that results from a collaborative effort and leads to common responsibilities, rather than documents or sources of information.
Conclusions: GRADE methodology facilitates the development of learning competencies, leadership and collaboration in EBP. This may avoid waste of efforts and human resources, as teaching experiences become opportunities for the development of healthcare networks.

4103
Examining the implementation of practice guidelines for the management of adult cancers: A mixed-methods study

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Background: Practice guidelines (PGs) are meant to link professional practice more closely to scientific evidence and improve the quality of patient care. Achieving the potential of PGs involves not only developing high-quality products, but also ensuring the recommendations are used at the point of care.
Objectives: Focusing on PGs for the management of adult cancers, we sought to: describe the intrinsic elements known to influence PG use; identify the ways in which PGs are implemented; and, explore how PG characteristics and contextual factors influence implementation and use.
Methods: We conducted a sequential mixed-methods study. First, we performed a content analysis of all PGs developed for the management of adult cancers in Nova Scotia, Canada, from 2005-2015. Data were extracted related to 22 elements known to influence CPG use. This informed subsequent semi-structured interviews with PG developers and end users to identify ways in which the PGs were implemented, and to gain perspectives about the influence of both PG elements and contextual factors on implementation and use. Two researchers analysed the interview data using the Framework Method.
Results: PGs (n=20) revealed large variation with respect to elements shown to influence PG use. For example, 85% included content related to individualis,ation and objectives. Yet, no PGs (0%) had journal or patient versions; discussed the education, training, or competencies needed to deliver recommendations; contained an explicit statement on anticipated work changes, or on potential direct or productivity costs; or identified barriers or facilitators that might influence PG adoption. Interview data from developers (n=4) and users (n=6) revealed five themes related to PG implementation and use: (1) lack of consistency in PG development; (2) timing and nature of stakeholder engagement; (3) credibility of the PG development process; (4) limited understanding of implementation as an active process; and (5) factors at organisational and system levels influence PG implementation and use.
Conclusions: This study provides complementary data to inform PG implementation and optimise their use in practice.

4104
What is the role of scientific evidence in decisions to adopt complex innovations? A multiple case study in cancer care

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Background: The delivery and outcomes of care can be improved by using innovations (i.e., new knowledge, technologies and practices) supported by scientific evidence. Yet, moving evidence into routine care is not simple. This means many patients do not receive the best care possible.
Objectives: To examine the role of scientific evidence when adopting complex innovations, including how scientific evidence is considered amongst other relevant factors.
Methods: Using case study methodology, we studied the adoption (i.e. decision-making processes) of complex innovations in cancer care. Five cases were purposefully sampled from one health region in Nova Scotia, Canada, representing innovations with differing evidentiary bases. Data were collected using key informant interviews (n=32) and document (n>100) analysis. Analysis involved in-depth analyses of each case and a cross-case analysis, with findings compared and contrasted across cases. Three researchers coded and analysed the data, with research team meetings to question and clarify findings.
Results: Cross-case analysis revealed: 1) scientific evidence played a greater role in early adoption processes when clinicians/divisions decided to advocate for the innovation – but a limited role in subsequent decision making, with organisational decision makers trusting those who brought the innovation forward. In all cases, 2) evidence from a plurality of sources informed decision-making, including clinical experience, local data, and information from other jurisdictions. The latter provided important insight into implementation challenges and real-world impact. A range of evidence sources was sought given that 3) decision makers negotiated three key issues when making decisions: expected budgetary and operational implications; expected impact on patients; and equitable access to care. Finally, 4) steadfast leadership, mostly by frontline staff without formal leadership roles, was essential to eventual adoption.
Conclusions: Scientific evidence has a declining role as adoption decisions progress to higher levels of an organisation; scientific evidence was neither sufficient nor necessary for adoption.

4105
The promise of hybrid designs for the evaluation of implementation efforts

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Background: The gap between the promise of empirically supported interventions and their successful implementation in the real world persists in a wide variety of contexts. Implementation science (IS) plays an important role in identifying barriers to address these gaps in the translation of evidence into policy and programmes. Yet there is only a beginning level of high-quality, empirically valid research into which implementation strategies are effective and can be used to achieve more rapid transitional gains in the uptake and use of these interventions. Improved methods are needed for the design and evaluation of implementation efforts in real world programme delivery. Objectives and
Methods: This paper will outline methods for better testing dissemination and implementation strategies by: 1) briefly outlining common theories and frameworks in Implementation Science that serve as conceptual guides for evaluation design 2) propose a number of 'hybrid' effectiveness-implementation evaluation designs that can be applied to these; 3) outline the design decisions needed to select these; and, 4) providing real-world examples.
Results: The common components of frequently used and well-published Implementation Science frameworks will we presented, and this will be coupled with proposed hybrid evaluation designs that test both intervention outcomes and implementation interventions/strategies. These hybrid designs are intended for use in real-world settings, testing implementation strategies while observing and gathering information on the intervention's impact on relevant outcomes.
Conclusions: Hybrid evaluation designs for testing dissemination and implementation strategies have the potential to speed the translation of high-quality evidence into routine practice.

4106

Strengthening capacity to use research evidence in policy making: Experience from Kenya and Malawi

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Background: Although weak capacity for evidence use among policy makers has been acknowledged as being among the key barriers to evidence use, we still do not know much about what works and what doesn't in strengthening capacity of policy makers for increased evidence use or consideration.
Objectives: Implemented 3-year project to test interventions for strengthening institutional and individual capacity for evidence use among health-sector policy makers in Kenya and Malawi.
Methods: To strengthen institutional leadership and capacity, we conducted sustained high-level advocacy, developed guidelines for evidence use, and facilitated increased interaction between policy makers and researchers. To strengthen individual capacity, we conducted training workshops on evidence-informed policy making (EIPM) and on-the-job follow-up support to technical staff in ministries of health in the two countries.
Results: Evaluation results show that while the project was highly effective in improving individual technical capacity of policy makers in EIPM, it registered mixed results in its efforts to strengthen institutional leadership and capacity for EIPM. At individual level, evaluation results show notable increase in knowledge and skills in EIPM among trained staff. The results also reveal notable mind-set shift and increased confidence in EIPM among those trained - some of the staff are championing and supporting better and improved use of evidence in their units. At institutional level, the programme increased priority to evidence use, developed institutional guidelines for evidence use, and stimulated some institutional reforms for improving evidence use, but failed to bring about major changes in institutional structures that support evidence use.
Conclusions: Project's limited performance on strengthening institutional capacity is not surprising since changing institutions is complex and requires long-term investments. Results point to the fact that efforts to improve individual and institutional capacity for evidence use need to go hand-in-hand or risk losing gains made at individual level over time if institutional strengthening efforts are not sustained.

4107

Consistency of adverse events from literature and real world state monitoring data

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Background: Evaluation of adverse events (AE) and adverse reactions (ADR) is challenging when there is no proper observational study or monitoring data. Limited by insufficient safety data, difficulties are often encountered when determining both evidence quality in systematic reviews (SR), and levels of recommendations in guidelines. AEs/ADRs reported in literature types other than RCTs are usually ignored in intervention SRs/guidelines.
Objectives: To investigate the consistency of AEs/ADRs from the real world state monitoring data, the whole literature base and RCTs, and to see the possibility of using the later as an alternative of the former in SRs or guidelines.
Methods: Taking one patent Chinese medicine (an extraction of Cordyceps sinensis extraction, about 20 million USD marketing per year) as an example, we obtained the AEs/ADRs reported in ADR monitoring center of the State Food and Drug Administration (SFDA) of China from 2003 to 2016, and AEs/ADRs reported in the literature up to 2016 searched from PubMed, Embase, Cochrane Library, CNKI.,Wanfang data, VIP and CBM Data processing was duplicated independently and agreements were achieved. AEs/ADRs were transferred and classified according to

the WHO Adverse Reaction Terminology (WHOART).
Results: 610 AE reports were found from the SFDA ADR monitoring system. ADRs suspected were 537 (88.03%). 5568 AEs were identified from 172 papers (62.79% RCTs, 13.95% case series/reports, no cohort or case-control study) with 86 ADRs (1.54%). The distribution of AEs and ADRs from whole literature base were almost the same with the monitoring system (supplement table). While, 271 AEs were identified from 108 RCTs (n=4682). ADR rate was 0.021%. AEs and ADRs reported in RCTs were significantly different from the two above data sources.
Conclusions: When AE/ADR monitoring data or large observational study is lacking or unavailable, AEs/ADRs reported in whole literature might be a better alternative than the data obtained only from RCTs for intervention SRs/guidelines.

Attachments: Table.jpg, Table2.jpg

4108
Making evidence actionable: the PACK clinical-decision support tool

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Background: Delivering evidence-based primary care is complex, particularly in low-income countries. Evidence is usually generated in high-income countries; medical evidence databases designed as point-of-care tools cater for these settings. Increasingly evidence-aligned, WHO guidelines target low-resource settings, but their single-disease focus hampers use in growing multi-morbidity. The Practical Approach to Care Kit (PACK) is a clinical decision support tool underpinning a health systems intervention adopted throughout South Africa and elsewhere that improves outcomes and quality of primary care. Evidence and WHO aligned and adaptable to local policy, it has been described by a nurse as 'A tool for every day, for every patient'.
Objectives: To describe PACK tool features that make evidence actionable in a primary care setting.
Methods: We examined end-user need - patients have multiple symptoms and conditions (often undiagnosed) and require screening, assessment and routine care - and defined core PACK principles: comprehensiveness, integration, feasibility and usability. Iterative development drew on local stakeholder feedback on 15 annual editions, along with content alignment to policy, latest evidence sourced through BMJ's Best Practice and WHO guidelines.
Results: PACK is a 120-page guide to over 500 symptoms, syndromes and conditions. Clinical, written and physical design features realise the PACK principles: a symptom-based approach makes explicit clinical decision-making processes; content is standardised into an algorithm and checklist format; language is simple and concise; comprehensiveness enables clinical integration and prompts to screen and diagnose; aligning evidence-based content to policy ensures feasibility. Development, updating and localisation work led to system improvements to prescribing, practice scope, referral pathways and policy consolidation, in turn enabling PACK implementation.
Conclusions: Lessons from our 15-year, multi-country experience are that to make evidence actionable interventions must cater to end-user need and that the process of development, update and localisation of content are integral to implementation.

4109
Robotic research meets professional craft: Meta-ethnography exploring influences on school-based evidence-informed decision making for health, wellbeing or educational improvement

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Background: Schools are important avenues for promoting health and wellbeing. They enable a broad reach of

children with opportunities to set healthy behaviours early in the life-course and address health inequalities. Despite the growing evidence base available to inform school health improvement, its low contribution to decision making and practice is a well-documented problem. Knowledge translation (KT) in educational settings is under-researched. Urgent design of new KT strategies should be informed by a rich understanding of the causal mechanisms sustaining the low use of evidence for either schools' core business of education or their wider health and wellbeing practices. Research questions: What are school practitioners' views and experiences concerning external research evidence and its use in decision-making? What new insights can these accounts offer to guide the development of KT interventions for schools?
Methods: A systematic review and meta-ethnography was performed according to the seven phases outlined by Noblit & Hare (1988). Fourteen qualitative studies were included, reported between January 2000 and December 2015. They were identified following a rigorous search for published and unpublished literature in seven bibliographic databases and additional snowball techniques. A conceptual model and storyline was produced following re-reading of papers, reciprocal translation and line of argument synthesis.
Results: Five overarching conceptual themes emerged: i) the power of epistemologies orientated in practice; ii) symbolic meaning research-evidence holds for teachers iii) practitioners' role-identity; iv) social processes underlying the diffusion of knowledge; and v) underpinning organisational and socio-political contexts.
Conclusions: Drawing on theories of symbolic interactionism, the line of argument foregrounds the social shaping of the meaning of research and its place within the practitioner identity. Insights for the design of KT interventions in school will be discussed.

4110
Development of a method to evaluate patient explanations using electronic medical records

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Background: Patient explanation is an important factor for improving patient safety and satisfaction. However, evaluating patient explanations presents practical challenges.
Objectives: The purpose of this study was to develop methods to evaluate patient explanations using clinical documentation data from electronic medical records (EMRs) provided by healthcare professionals.
Methods: Nursing records were selected for analysis because they are the most detailed EMRs amongst those provided by all healthcare professionals. Therefore, electronic text data from nursing records of an acute hospital dated May 2015 to November 2015 were collected from an EMR server. All 2365 records were text-mined and 2620 records were found to include patient explanations. Records were broken into 16 348 sentences and 246 940 words. Words were parsed by word class and analysed using correspondence analysis methods.
Results: Of the 2620 records, 529 (20.2%), 513 (19.5%), 1121 (42.8%), and 767 (29.7%) records contained explanation documentation regarding the patient's condition, admission/discharge, medical procedure(s) (e.g. injection and operation), and patient reaction to the explanation (e.g. understanding and anxiousness), respectively. In addition, 36.8% of explanation documentation on the patient condition accompanied patient reaction to the explanation, 40.2% on medical admission/discharge, and 35.0% regarding medical procedure(s). Results of correspondence analysis indicated that documented explanations of the patient condition tend to include the words 'family' and 'talk', admission/discharge explanations tend to include the words 'outpatient' and 'consultation', and medical procedure explanations tend to include the words 'question' and 'anxiousness'.
Conclusions: This study suggests that documentation data from EMR provides an opportunity for quantitative analysis of the quality of patient explanations. Although this study was limited to a case study, the analysis methods in this study can be applied to all hospitals that use EMR.

4111
Evidence supporting the shortened dental arch for under-privileged South Africans

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Background: Global evidence suggests that shortened or posteriorly reduced dental arches (SDA or PRDA) are adequate for functioning and may benefit resource-restrained communities. This concept has been embedded within the National Oral Health Policy of South Africa since 1994, though no contextual evidence guided its inclusion to inform this policy. The teachings and clinical practices also lack explicit reference to such a beneficial concept.
Objectives: To provide evidence that support a functional dentition represented by a shortened dental arch, minimising expensive prosthodontic interventions for South African communities.
Methods: A step-wise approach in study designs was implemented amongst a South African cohort. A systematic review, followed by an overview of systematic reviews was conducted to guide researchers with the literature and provide a scaffold for the cross-sectional questionnaires and cross-sectional clinical study for this cohort. These studies were completed with general dental practitioners, clinical teachers and dental students to determine what was currently taught and clinically practiced. A follow-up randomised-controlled trial was subsequently conducted to determine patient satisfaction and quality of life with a SDA or PRDA.
Results: Studies completed were from the top end of the hierarchical evidence pyramid; thus their results provided improved evidence related to reliability and validity and in support of the benefits of the SDA or PRDA. The generalisability of outcomes obtained related to settings, subject, intervention, results and costs which were acceptable for this cohort. Aspects of knowledge translation (KT) such as diffusion (creating awareness) and dissemination (publishing and conference presentations) were fulfilled.
Conclusions: This step-wise approach predominantly highlighted the absence of the implementation aspect of KT; that is the application of the SDA or PRDA concept to clinical practice which could positively impact patients' treatment costs, satisfaction and oral health-related quality of life within the SA context.

Attachments: Evidence supporting the shortened dental arch for under.pdf

4112
Building the evidence base for children's and family support services using practice-based evidence

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Background: The focus of governments – federal, state and local – on evidence-based policy making (EBPM) has concentrated attention on using evaluations to identify 'best-practice' policy interventions in particular settings which can be 'scaled up' and 'emulated' or 'rolled out' in other settings (Cairney 2016)(1). Recent writing on EBPM has highlighted the diversity of approaches that can be taken to gathering evidence and using it to draw conclusions about 'what works' and what could be valuably 'scaled up'. Paul Cairney's work in this regard (2016) proved germane to a project undertaken by the author to document and analyse evidence regarding parent support interventions trialled by the Children's Resources Unit (CRU) in Wyndham City Council, in Melbourne Australia.
Objectives: The aims of the project (conducted in July-August 2016) were to: • Document parent-support interventions developed by CRU staff • Establish evidence of what had worked, and why • Develop clear objectives, outputs and outcomes for the future • Clarify a process for ongoing review of the family support interventions and assessing the extent to which service elements achieve effective outcomes for parents.
Methods: The paper argues the approach used by the CRU to document 'real world' practice-based evidence is similar to what Cairney describes as 'the Scottish Approach' to policy making, which favours encouraging government professionals to draw on established expertise and a mix of evidence and to experiment with projects

in their local areas.
Results: The paper shows how such an approach helped establish evidence not only for improving the effectiveness of local-level integrated service interventions but also building the larger evidence base of 'what works' in improving outcomes for children and families.
Conclusions: It concludes by suggesting a multi-dimensional evidence-informed decision-making framework like that proposed by Moore (2016) could facilitate partnership approaches to co-designing, co-delivering and co-evaluating interventions so they are consistent with client or family needs, manageable for the family and are effective in achieving agreed objectives.

4113
Is sustainability being addressed in implementation science?

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Background: Failure to sustain implementation of health interventions has implications on cost and patient care, and diminishes trust and support for future implementation. Even if implementation has a small benefit, sustained implementation can have significant potential impact.
Objectives: To determine if projects funded through National Institutes of Health (NIH) Dissemination and Implementation Research in Health Study Section (DIRH) of the Research Project Grants (R01) considered or planned for sustainability.
Methods: Phase 1: We conducted a document review of all active and completed RO1 grants within the DIRH section in October 2016 using the publicly accessible NIH RePORTER Database. Data including focus of the project, mention of sustainability planning and use of frameworks were abstracted on funded projects and related publications by 2 independent raters. Phase 2: Semi-structured interviews were held with a sample of these funded investigators to explore their understanding of, and how they planned for sustainability, as well as challenges to considering sustainability.
Results:76 implementation science projects were funded between 2004 and 2016. Of these, 26% mentioned sustainability in their NIH RePORTER abstract, 15% mentioned sustainability in their published results, 9% mentioned sustainability in their NIH RePORTER profile and published results, and 50% did not mention sustainability. No project included a definition of sustainability and only one project included a sustainability framework. Eleven investigators were interviewed and all described challenges with considering sustainability in their projects including lack of: clarity on the definition of sustainability; awareness of appropriate frameworks and how to measure sustainability; and, organisational awareness of its importance.
Conclusions: While interest in conducting implementation science has grown, there is a lack of work to advance the science and practice of sustainability of implementation. Addressing this gap is critical to inform implementation practice across health systems.

Attachments: sustainability abstract-funded grants-22feb2017.pdf

4114
Exploration of factors influencing the development of evidence-based practice in a medical centre in northern Taiwan

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Background: Over the past 15 years, evidence-based practice has emerged as a major policy theme in Western

healthcare systems. Evidence-based practice has been promoted in Taiwan for more than 10 years. At present, evidence-based practice has been considered the best tool for discovering and solving clinical problems of nursing staffs. Since we have taught evidence-based practice skills in the department of nursing in a medical centre of northern Taiwan, it's high time to examine the attitude of developing evidence-based practice of nurses.
Objectives: The objectives of this study were to realise the result and explore the factors influencing the development of evidence-based practice of clinical nurses.
Methods:A cross-sectional study was designed to explore the attitudes of clinical nursing staffs by developing evidence-based practice questionnaire traditional Chinese version. The questionnaire was placed on the nursing department website. We send the invitation email and the questionnaire web address link to the head nurses of every unit in nursing department, and then asked them to transfer the mail to the staffs of the unit.
Results:A total of 1227 valid questionnaires were received. The average age of the nurses was 33.46 ± 8.51 years old. The seniority was 18.27 ± 6.78 years. Nursing clinical status N2, order level nurses, university degree and unmarried were majority. In Bases of practice knowledge dimension, the senior clinical staffs shared information most. The biggest barriers to finding and reviewing evidence and to changing practice on the basis of evidence was insufficient time at work. The greatest supporters are nursing supervisors, the least supporters are physicians. We found nursing clinical status, job title, whether trained by evidence-based courses and statistical classes were significant factors of 5 sections of developing evidence-based practice ($p<.05$).
Conclusions: Nursing clinical status, job titles, trained by evidence-based and statistical courses were the significant factors influencing developing evidence-based practice. We suggested that we can promote evidence-based practice from these groups and these courses.

4115

Prevention of heel pressure ulcer among adult patients in orthopaedic wards: An evidence-based implementation project

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Background: Immobility and prolonged bed rest often lead to heel pressure ulcer (HPU) in patients. Evidence suggests that offloading heel with relieving devices aids decrease the occurrence of hospital acquired pressure ulcer. A point prevalence audit undertaken in orthopaedic wards of a Singapore tertiary hospital reported that 20% (6 out of 30) of patients with impaired mobility have mild to blanchable redness on their heels. The results reported inconsistency in nurses initiating heel-offloading techniques and documenting this nursing intervention.
Objectives: The evidence-based project sought to achieve 80% compliance of nurses to practice heel-offloading practice and 50% reduction in HPU occurrence.
Methods: The project was undertaken in two orthopaedic wards. A pre and post-implementation audit strategy, with the Joanna Briggs Institute Practical Application of Clinical Evidence System and Getting Research into Practice programmes was utilised. The implementation occurred over 17 months, from March 2015 to July 2016 (Table 1). All nurses were briefed to offload the affected lower limbs using heel foam protector and a towel or pillow. These were shared through daily roll-calls using a pictorial guide (Figure 1). A sample size of 30 patients with impaired mobility according to the Braden Scale was audited via consecutive sampling.
Results: There was an increased in nurses' compliance in performing the heel-offloading techniques when compared to the pre-implementation audit, at follow-up audit 2 (20.0% vs. 76.7%). Nurses had consistent documentation of heel offload (63.3%).The post-implementation audit showed 83.3% compliance on nurses performing heel offloading techniques in the subsequent two follow-up audits. The incidences of HPU development decreased from 6 to 3, a 50% reduction since the initiation of the project (Table 1).
Conclusions: The implementation of the heel offloading significantly reduced the incidence of HPU in the orthopaedic wards. It is essential to equip the nurses with knowledge on heel offloading and its implications while reducing the incidences of HPU

Attachments: Table 1 Audit compliance results.jpg, Figure 1 Implementation strategies using visual aid.jpg

4116

Understanding implementation research: Case study from the HIFA virtual discussion forum

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Background: Healthcare information For All (HIFA), is a global initiative of more than 15 000 individuals in 270 countries. Under a new programme on Evidence Informed Policy and Practice, supported by WHO, TDR and The Lancet, themed discussions were conducted in the HIFA virtual forum.
Objectives: To present the results of the themed discussion on 'Implementation Research(IR) - engaging everyone, not just scientists'.
Methods: The HIFA moderator introduced IR in the first week and every week one set of question was send to the forum: • Have you ever heard of IR? What do you think of it? • Have you been involved in any IR? Can you tell us about your experience? What was your group able to accomplish and how? What were the challenges? • Have you used or applied the results of IR? How? What were the benefits? What were the challenges? • If you are a frontline healthcare provider, what are the key challenges in making medical treatments and other health services available to the population you serve? What needs to be done to better understand and address these challenges? Can you suggest IR questions that might be explored through IR? • How does your community (local community, country, professional group) view health research? How could you get them involved? • What is needed to strengthen national and international capacity to undertake and apply IR? A thematic analysis was conducted.
Results: There were about 100 substantial contributions from across the globe and the following themes emerged on thematic analyses : • Confusion about terminology and scope of IR, particularly in relation to quality improvement, operational research, knowledge translation and health-services research. • Difficulty in locating IR articles for policy making, programme planning and research • IR provides an opportunity to better understand the health system and policy perspective, and research questions are best identified by health workers.
Conclusion: There is a need to conduct more research on misgiving about IR and use the results to clear such doubts. More awareness and training about IR among healthcare, research and policy professionals is required.

4117

Rehabilitation and Cochrane: A difficult relationship

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In the rehabilitation world, there is widespread indifference towards Cochrane reviews (CRs) and their results. One aim of Cochrane Rehabilitation (CRF) is to change this attitude while increasing quantity and quality of CRs in the field. To better understand this situation and find a way to solve it, we performed a short survey among CR authors who joined CRF. The reported problems can be grouped as follows: • Rehabilitation interventions are complex, difficult to standardise, with different components and contents; lack of existing 'standard care'. • RCTs are complex; often lacking because they are unfeasible due to some clinical questions. • CRs: impossibility to

include alternative designs, evidence systematically downgraded due to unavoidable characteristics of rehabilitation (e.g. lack of blinding). • Cochrane Review Groups (CRGs): reduced interest leading to low priority, and difficulty to find the appropriate CRG for rehabilitation interventions. These problems are believed to make it difficult to perform CRs on the one hand, on the other to have them accepted by CRGs. There is a perception of frustration and difficulty in working with Cochrane. Nevertheless, there is agreement that Cochrane provides an essential role in evidence-based rehabilitation. Moreover, responders believed that, despite the problems, their published CRs have been useful for the world of clinical rehabilitation. It was also recognised that the problems with conducting CR in rehabilitation are common to other fields where complex interventions are proposed. Possible solutions include: • the development of CRF, perceived as a relevant effort; • present good arguments for, or develop, different approaches or guidelines or methodologies about how to do robust reviews (and conduct robust studies) in rehabilitation; and, • introduction of observational effectiveness study designs in rehabilitation CRs. This survey confirmed the existence of problems for CRs in rehabilitation; they are mainly, but not only, methodological and there is a clear need for CRF to work to solve these problems.

Attachments: Abstract_CochraneRehab3.pdf

4119

Building evidence utilisation capacity of health policy makers at the Federal Ministry of Health in Ethiopian: Mentor – mentee experience

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Background: After providing training to make sure whether the trainees really make use of it in their real work situation. Needs assessments showed various needs to build research evidence utilisation of health policy makers in the Federal Ministry of Health (FMOH). A specialised training curriculum was prepared and 5 days intensive training was conducted in Addis Ababa. Trainees showed intensive interest in mentoring programme to make use of the training in their day-to-day policy-making process and we agreed on 6 months (Sept. 2015 – Feb 2016) mentoring with FMOH.
Objectives: To share experiences of mentor-mentee programme.
Methods: Mentor – mentee pairs were formed. Mentees communicated on what problem, policy, programme guideline they are currently working to mentors through a specially created evidence-based healthcare Google group to ensure everyone received communications about solutions to various problems/situations. In addition to the Google group mentors interacted through email, phone and face to face. Mentors also sent website resources, published papers, documents, policy briefs, systematic reviews, and summaries.
Results: Improved mentees' skills, knowledge and attitude towards use of evidence for policy and programme preparation. Google group postings and mentoring brought positive changes among participants improving their personality traits such as motivation, creativity, confidence and communications. Participants strongly want this training and mentoring programme to be imparted to all technical advisers in FMOH before annual plan preparation to be more fruitfully used in their work. The Mentoring and Google group programme should be maintained until the trainee becomes self-sustained in using the skills in their day-to-day work.
Conclusions: There is a dire need for a permanent solution to provide information, advice, and resources to FMOH experts or persons involved in policy making or guidelines formulation which they can approach any time through email, websites and contact details of the various mentors, experts and trainers.

4120

The journey from working group to guidelines, via evidence: Ensuring equity of access to rehabilitation for people with stroke

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Background: Access to rehabilitation has recently been identified as a pressing global need by the WHO at their 'Rehabilitation 2030: A call for action' meeting, Geneva, 2017. Inequity and opacity have been anecdotal features of accessing rehabilitation services for people after stroke in Australia.
Objectives: To ensure people with stroke get access to the right rehabilitation, at the right time, in the right place.
Methods: Ten years ago we embarked on a journey to redress stroke rehabilitation access issues in Australia by: quantifying the problem; forming a national expert working group; looking at the evidence for best practice; devising a framework and decision-making tool; and, piloting and then implementing these evidence-informed practices in 10 sites using a randomised and controlled trial design.
Results: From national audit data, our journey has achieved the objectives of improving consumer access for some and not others. So inequity is still an issue. We examine why this unacceptable variation in practice still exists, what role beliefs and values, resourcing and resistance to change may hold in explaining our results. We also find ourselves in the national guidelines - we ask ourselves is that a surrogate for success?
Conclusions: Our reflections on a ten-year program of change will be pertinent to the entire cycle of taking evidence to practice.

4121
Using the results of a qualitative systematic review for quantitative instrument validation

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Background: Commonly a qualitative exploratory study serves as the foundation for quantitative instrument development. This was the case in the 1979 development of Molter's Critical Care Family Needs Inventory (CCFNI) that became the benchmark instrument for measuring family needs associated with critical are hospitalisation of a loved one. Objective: This session will describe a process whereby the results of a qualitative systematic review on family needs of adult critical care patients was used to evaluate the relevance and the validity of the CCNFI. Method: Mixed-method systematic review.
Results: The results of the qualitative systematic review included 410 findings extracted from 42 articles that were critically appraised to be of adequate rigour. These findings were then collapsed into 23 categories and synthesised into 3 meta-aggregative statements providing lines of action for meeting family needs. This meta-synthesis provided a conceptualisation of the phenomenon of family needs and specific behaviours, interests, desires and expectations that underlie the construct. A secondary data analysis was undertaken to compare the findings and categories to the items, subscales, and factor analysis components of Molter's CCFNI using the results of a systematic review and meta-analysis of 25 studies. Using a theoretical content analysis approach the researchers went back and forth between the qualitative lens to a quantitative lens and vice versa until maximal meaning and fit had been achieved. Conclusion: Although there were some constants across the data (i.e. the need for information and close proximity), qualitative meta-synthesis suggests that the tool may not be as relevant today and that updating of the tool is called for to achieve maximum utility.

4122
Introducing the Global Evidence Synthesis Initiative (GESI)

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Low- and middle-income countries (LMIC) have lower levels of production and use of evidence syntheses to inform practice and policy decisions, compared to high-income countries. A major reason for this difference is the limited capacity to undertake evidence syntheses and support their use in LMICs. The Global Evidence Synthesis Initiative

(GESI) was launched to enhance such capacity. GESI was founded by a number of global or internationally oriented research organiSations committed to the production and use of evidence syntheses to enhance professional practice and public policy. The founding organisations include the Alliance for Health Policy and Systems Research, the Campbell Collaboration, Cochrane, the Collaboration for Environmental Evidence (CEE), the EPPI-Centre, the International Initiative for Impact Evaluation (3ie), and the Joanna Briggs Institute. The secretariat supporting and manage GESI functions is hosted by the Center for Systematic Reviews on Health Policy and Systems Research (SPARK) the American University of Beirut (AUB) in Lebanon. The secretariat reports to a GESI governance group that represents GESI's founding organisations. An advisory group will also be established to act as an additional source of support and advice for the secretariat and the governance group. GESI is establishing a Network of centres of evidence synthesis in LMICs. At the Summit, we will describe GESI's efforts to form the Network, hold capacity building activities such as workshops and webinars, raise funds and use them to support ten GESI Evidence Synthesis Centres, to be selected out of the GESI Network.

4123

Prevalence and determinants of hypertension in people living with HIV/AIDS in Fako Division, southwest region of Cameroon

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Background: The advent of highly active antiretroviral therapy (HAART) has greatly reduced the morbidity and mortality of HIV/AIDS patients but has also been associated with increased metabolic complications and cardiovascular diseases (CVD). Pre-hypertension elevates the risk of CVD and that of end-stage renal disease.
Objectives: Primarily to determine the prevalence of hypertension in HIV/AIDS patients in Fako Division, Cameroon; and secondarily to assess the predictors of hypertension in this population.
Methods:A cross-sectional study was conducted at the Buea and Limbe Regional Hospital HIV treatment centers between March and August 2014, involving 209 HIV/AIDS patients (157 on HAART regimens for at least 6 months and 52 HAART-naïve patients). In addition to the self-reported information on risk factors, height and weight, and blood pressure were measured during routine health checks at the centres. Blood pressure was measured using digital blood pressure measurement devices. The averages of two measurements at the right arm at heart level after a period of 5 minutes of rest were recorded and used in the analysis. HTN was defined as a systolic blood pressure (BP) ≥ 140 mmHg and/or diastolic BP ≥ 90 mmHg.
Results: The prevalence of pre-hypertension and hypertension was 51.7% (95% CI, 44.9-58.5) and 20.1% (95% CI, 14.7-25.5), respectively. The prevalence of hypertension in patients on HAART (22.3%; 95% CI, 15.8-28.8) and that of the HAART-naïve patients (13.5%; 95% CI, 4.2-22.8), p = 0.1710 was recorded. Multivariate analyses were done for age, gender, family history of hypertension, BMI-defined overweight, HAART use, physical activity and alcohol use. The adjusted odds ratio of the male versus female gender was 3.73 (95% CI: 1.49–9.35), p = 0.005. Hypertension was associated with BMI-defined overweight, family history, physical activity level and male gender.
Conclusions: The prevalence of hypertension in HIV/AIDS patients in Fako Division is elevated in both patients on HAART and those not on treatment. Blood pressure and cardiovascular risk factors should be routinely monitored. Other factors should also be considered.

4124

Review of Cochrane systematic reviews by medical students: Disseminating information of excellence on evidence-based health

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Background: The Medicine School in Universidade Federal de São Paulo, in Brazil, has an Evidence-based Medicine Academic League. Medical students work, in partnership with the Cochrane Brazil and the Associação Paulista de Medicina (publisher of Diagnóstico & Tratamento journal and São Paulo Medical Journal), to disseminate information of excellence on evidence-based health across the country. (Figure1.Journal covers.)
Objectives: To report about one of the most successful experiences of the League, the production and regular publication of reviews of Cochrane systematic reviews in two medical journals.
Methods: The students choose the theme to be evaluated. With the tutor's guidance, they make a systematic search, translate and evaluate studies which fit the original theme. The overviews are submitted for publication in Diagnóstico & Tratamento journal, in which a new Cochrane Highlights section was created: What Cochrane systematic reviews say about ...?. This is an open-access, scientific, regional journal, with its printed version, in Portuguese, distributed to all physicians in São Paulo state (the Brazilian state with the largest concentration of physicians), and they are indexed LILACS and fully available for free on the publisher's website. The same section was also created in São Paulo Medical Journal, this one also an open-access journal indexed in LILACS, SciELO, Medline and ISI. The journals evaluate the paper as a regular submission, through peer-review, and propose changes.
Results: So far, the League has produced 9 manuscripts in 2 years, that were published as shown in Table1. Table 2 shows the studies under development.
Conclusions: By writing the overviews, medical students learn to obtain quality information through Cochrane systematic reviews, and they are introduced into the Cochrane methodology, translations and interpretation of findings from systematic reviews. In addition, as the journals are widely distributed, they spread quality information in English and Portuguese to a range of doctors who may not have full access to conferences and meetings for professional updates, helping in the dissemination process.

Attachments: Table1.jpg, Table2.jpg, Figure1.jpg

4125
Confidence regarding evidence-based practice in outpatient department nurses

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Background: Evidence-based practice (EBP) can be defined as the integration of clinical expertise with client values and the available research evidence. Outpatient department (OPD) nurses are the first line to face patients and need to integrate nursing information for EBP. However, a major limitation lies in the fact that OPD nurses only have short time to talk to patients.
Objectives: The study wanted to understand OPD nurses' confidence in evidence-based practice.
Methods:A convenience sample of OPD nurses from a medical centre completed a survey designed to measure nurses' confidence in EBP. The survey consisted of the Evidence-Based Practice Confidence (EPIC) scale, as well as demographic questions.
Results: Of the respondents (n = 38), the mean age was 38.6 years (SD=5.94), clinical experience was 15.74 years (SD=6.88), learning EBP class time was 13.68 hours (SD=23.44), and the mean EBP confidence was 68.5% (SD=0.15). OPD nurses showed the more confidence in EBP. The lower confidence item is "Q7 Appraisal: interpret study results obtained using statistical procedures such as linear or logistic regression?" (M=5.05, SD=1.83). 82% said "It is difficult to read English papers". On the other hand, they said there was no time to read EBP papers (55%). Only 26% wanted to join a journal club.
Conclusions: The OPD nurses need to construct their competency and confidence in EBP. The OPD nurses must to build their ability to apply EBP principles and help doctors to share decision making with patients.

4126

Chinese proprietary herbal medicines for common cold — a rapid recommendation which revealed huge research waste in the field of TCM

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Background: Chinese proprietary herbal medicines (CPHMs) have a long history in China for the treatment of common cold; more than 300 CPHMs have been authorized by China Food and Drug Administration (CFDA).
Objectives: To provide an evidence-based recommendation for clinical practice on CFDA approved CPHMs for the common cold.
Methods: CENTRAL, PubMed, EMBASE, SinoMed, CNKI, VIP, and online clinical trial registry websites were searched till 31 March 2016. Parallel-group RCTs of CPHMs compared with no treatment, placebo, or symptomatic treatment were included.
Results: A total of 333 CPHMs were approved by the CFDA, however, only 2 of them had one RCT to support their use. For adults with wind-heat type of common cold, trial 'Xu 2015' showed that Shufeng Jiedu capsule had a better effect on cure rate within 1 days (RR 4.74, 95% CI 2.61 to 8.61) and fever subsidence time (MD -5.50 h, 95% CI -6.33 to -4.67) compared with placebo. For children with wind-cold type of common cold, trial 'Di 2012' showed that Ganmao Qingre granules do not have better effect on cure rate within 5 days (RR 1.31, 95% CI 0.78 to 2.19) compared with p-acetaminophenol.
Conclusions: Our study revealed two things, first, there is enormous lack of evidence for clinical use of CPHMs and policy making in China. More importantly, our study brought to light the tremendous scientific waste in the field of TCM. Although more than 13000 clinical trials had been conducted to investigate the effects of CPHMs for common cold, nearly all of them could not be used as clinical evidence due to important defects in study design, such as unclear diagnostic criteria, inappropriate use of control and/or outcome measures. Future policy makers should pay more attention to the evidence making and TCM investigators should attache great importance on the rigour of study design.

4127

Healthcare workers' perceptions and experiences on using mHealth technologies to deliver primary healthcare services: A qualitative evidence synthesis

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Background: Mobile health (mHealth) technology is used in primary healthcare to improve the delivery and organisation of services, and communication on all levels. mHealth effectiveness reviews attest to the ubiquitous and diverse nature of these technologies, and show mixed results of its effectiveness. These reviews should be supplemented with describing and understanding the facilitators and barriers to the successful use of mHealth.
Objectives: This review seeks to identify, appraise and synthesise qualitative research evidence on healthcare workers' perceptions and experiences regarding their use of mHealth technologies to deliver primary healthcare services. It further aims to identify hypotheses about why some technologies are more effective than others.
Methods: The review team independently double-screened the abstracts, titles and full texts for inclusion, and two reviewers will independently do peer-data extraction for the included studies. A thematic content analysis will be used to analyse the data from these studies. We will apply the CERQual methodology to assess and describe the level of confidence that can be place in the findings from our review.
Results: We included 46 full texts from the 3655 titles/abstracts we screened, and are at the data-extraction stage.

We will present the full results at the Summit. A preliminary reading of the included studies suggests: (i) healthcare workers have mostly positive views on using mHealth; (ii) successful implementation requires integration with the broader health system in which it is used; and, (ii) barriers are related to operational challenges such as poor connectivity and maintenance costs.
Conclusions: mHealth has become entrenched in the delivery of primary healthcare services. Identifying the facilitators and barriers to the efficient use of these technologies, as reported in the experiences and perceptions of those using it to deliver healthcare, may contribute to understanding the mixed results of effectiveness studies.

4128
Early weaning off of incubator humidification in the Neonatal Intensive Care Unit (NICU): An evidence-utilisation project

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Background: Infants born at less than 32 weeks of gestation age (GA) are nursed in closed humidified incubator to minimise transepidermal water loss and prevent electrolytes imbalances. However, high or prolonged humidified environment is associated with Candida albicans, which has high mortality rate of 21-32% in very low birth weight infants. In 2014, two infants in the Neonatal Intensive Care unit were found to have acquired skin Candida albicans infection. Aims: To minimise skin candida infection in infants requiring closed humidified incubator.
Methods: This evidence-utilisation project was conducted in an 18-bed NICU at National University Hospital, Singapore in January 2015. An evidence search found that Joanna Briggs Institute's (JBI) recommended reducing incubator humidification after the first week by 5% daily from 85% to 50%. Taking into consideration that the NICU humidity level is 65%, the weaning off of incubator humidification period after the first week was reduced from 1.5 – 3 months to 4 days. Early weaning off of the humidity setting schedule was placed at all incubators as a quick reference to staff. Three post-implementation and six sustainment audits to monitor staff compliance to practice change were conducted in April – June 2015, and January - June 2016, respectively.
Results: All audits showed 100% staff compliance to early weaning off of incubator humidification. Since the implementation of the change of practice, no skin candida infections were reported in 2015 and 2016 after the two acquired in 2014. The change of practice has reduced the duration of incubator humidification from 1.5-3 months to 11 days, which saved about SGD$193.20 consumable cost per infant. This translates to a total estimated cost saving on consumable for 101 babies of SGD$19,513 from 2015 to 2016.
Conclusions: Early weaning off of incubator humidification has successfully reduced Candida infection in NICU.

4129
The reporting of meta-epidemiological studies: A cross-sectional study

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Background: Randomised-controlled trials (RCT) are considered as the primary study, systematic review/meta-analysis as the secondary study and meta-epidemiological study as the tertiary study. To date, several reporting statements were developed for RCT and systematic review, but none for meta-epidemiological study. Meanwhile, there is no research about reporting quality of meta-epidemiological studies.
Objectives: We aim to investigate the reporting of meta-epidemiological study.

Methods: We searched the Meta-epidemiological Studies in PubMed, Embase, Web of Science and Cochrane Library. The studies that the terminologies related to meta-epidemiology were reported in title or the methods of statistical analysis were those of meta-epidemiology were eligible for inclusion. Two independent reviewers identified the eligible studies and extracted the data by using standardised forms. Any disagreements were resolved by discussion or consulting the third reviewer.
Results: We identified 3528 references and included 75 articles finally. In title, 61 (80.1%) studies reported the terms related to meta-epidemiology. There were 15 terms used, and the top-five frequently reporting terminologies were meta-epidemiological study (60.7%, 37/61), meta-epidemiologic study (14.8%, 9/61), meta-epidemiological assessment (3.3%, 2/61), meta-epidemiological review (3.3%, 2/61) and meta-regression analysis (3.3%, 2/61). In abstract and the section of methods, 45 (60.0%) and 26 (34.7%) respectively reported that the study type was meta-epidemiologic study. In, 6 (8.0%) stated that the reporting was in accordance with the PRISMA statement. The other aspects of reporting quality of meta-epidemiologic study will presented at the Summit.
Conclusions: Most studies reported that the study type was meta-epidemiologic study in the title and abstract, but the terms varied.

Attachments: the terminologies related to meta-epidemiology reported in title.pdf

4130
Using bibliometrics to evaluate impact of systematic reviews in disability and rehabilitation research

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Background: The Model Systems in spinal cord injury (SCI), traumatic brain injury (TBI), and burn injury (Burn) are clinical centres of excellence funded by the National Institute on Disability, Independent Living and Rehabilitation Research (NIDILRR), US Department of Health and Human Services.Supported by the Model Systems Knowledge Translation Center (MSKTC), they conduct systematic reviews of evidence.
Objectives: Demonstrate the value of bibliometric measures for evaluating the impact of systematic reviews and the quality of studies included in systematic reviews.
Methods: Researchers conducted a bibliometric analysis of systematic reviews using Web of Science databases. Impact was measured by examining levels and trends in citation and journal quality indicators. In addition, the quality and impact of the original studies included the systematic reviews were examined through citation levels and metrics such as journal impact factor scores, journal ranking, and author h-index trends.
Results: The MSKTC-supported systematic reviews were cited consistently, in some cases with increased frequency in recent years. The level of citation is tied to the number of years since publication. Newer publications accrue limited citations due to publication lag and a lag in reporting in the Web of Science; the typical lag time was 2 years. Reviews were cited most frequently in rehabilitation journals and penetrated into related topical fields such as sport sciences, clinical care specialties, gerontology, or health policy. They crossed research and practical audiences, and included non-English language publications.This suggests that these reviews have had broad impact outside core topical fields and may impact research, clinical care, and policy. The analysis also revealed that the articles included in the reviews tend to be published in highly ranked, higher-impact journals and are frequently cited.
Conclusions: Bibliometric analysis is a valuable tool for evaluating the quality and impact of systematic reviews. Because of publication and citation reporting lag time, researchers may need to wait at least two years before beginning a bibliometric evaluation.

4131
The framework of evidence-based continuous clinical quality improvement

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Background: Evidence-based practice is the integration of "individual clinical expertise with the best available external clinical evidence from systematic research". But transferring research findings into practice is often a slow and difficult process. In the new healthcare environment, practitioners need to deliver healthcare based on sound scientific evidence and continuously innovating new, effective healthcare practices.So, it is important to develop a framework for practitioners to integrate evidence into practice and promote clinical quality improvement.
Objectives: This study was to develop a framework of evidence-based continuous quality improvement and provide a framework for nursing professionals to promote evidence implementation and continuous clinical nursing quality improvement through a systematic process.
Methods: Guided by the principles of PDCA, evidence-based nursing and work process, the framework of evidence-based quality continuous improvement was established through content analysis of evidence implementation related projects and literatures. Projects and literature were identified on searches of Medline, Embase, JBI library and Chinese databases. Review topics were focus on evidence-based medicine and nursing, evidence-based practice, evidence implementation, research utilisation and change process.
Results: The framework of evidence-based continuous quality improvement consisted of four stages and twelve steps, including evidence searching (including three steps: question identified, evidence searched, and criteria identified), status analysis (including three steps: team established, data collection and gap analysis), evidence implementation (including three steps: barrier analysis, strategy developed and take action)and outcome evaluation (including tree steps: system evaluation, practitioner evaluation and patient evaluation). And then it will turn to next cycle.
Conclusions: The framework of evidence-based continuous quality improvement provided nursing professionals a concept and method of promoting evidence into practice and promoting clinical nursing quality improvement.

4133
The trend of life expectancy for people with disabilities in Taiwan

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Background: The government of Taiwan provided welfare services for population with disabilities for the past thirty years. However, there is a lack impact research on those who received the welfare services.
Objectives: To reflect welfare services policy effects, this study aimed at estimating the life expectancy of people with different disabilities compared with the general population.
Methods: There were totally 1 015 892 people with disabilities registered in the welfare service programme and they were selected for this study. We used the life table method to calculate life expectancy between 2002 and 2011. The corresponding information for general population was collected from the demographic statistics reports of the Ministry of the Interior.
Results: The results showed life expectancy has been significantly increased for people with various types of disabilities during the past decade: people with memory loss (life expectancy was increased from 6.4 years in 2002 to 10.1 years in 2011), balance impairment (from 23.6 years to 43.3 years), physical disability (from 37.2 years to 43.8 years), loss function of vital organs (from 25.6 years to 49.1 years), vegetable person (from 9.9 years to 18.1 years), vision loss and blindness (from 21.9 years to 24.3 years), speech and language disabilities (from 22.4 years to 30.3 years), facial injuries (from 15.0 years to 22.5 years) and learning disability (from 25.1 years to 26.5 years).
Conclusions: Compared to general population during the same period, life expectancy in the disabled people has been significantly improved. Our results affirm that the welfare policy implemented in Taiwan has positive effects on health improvement for the disabled people.

Workshops

Concurrent Session A

Integrating GRADE network meta-analysis SoF tables in network meta-analysis reports

Facilitators: Yepes-Nuñez J[1], Mustafa R[2], Guyatt G[3], Brignardello-Petersen R[3], Brozek J[3], Santesso N[4], Schunemann H[3]
[1] *Health Research Methodology program at McMaster University, Canada;* [2] *University of Kansas Medical Center, USA;* [3] *McMaster University, Canada;* [4] *Cochrane Canada, GRADEing Methods Group, McMaster University, Canada*

Objectives: For individuals considering conducting a network meta-analysis (NMA), to gain familiarity in interpreting findings of NMA through of a GRADE Network metanalysis Summary of Finding (SoF) tables.
Description: Through user testing, the GRADE Working Group has developed a format for NMA-SoF table to presenting results of NMA for each outcome. It is important that reviewers consider how to interpret NMA evidence for clinical decision making of particular interventions. This includes identifying the primary comparison and the interventions for each outcome under consideration, the effect estimates, the certainty of the evidence, and the rank probabilities or the surface under the cumulative ranking curve (SUCRA). In this workshop, we will discuss these aspects in depth using examples. The workshop will begin with an interactive lecture providing details of the GRADE NMA SoF table and the interpretation of NMA results through this NMA-SoF table. Workshop participants will then break into groups of 5 or 6 to work through an example of a GRADE NMA SoF table, guided by facilitators when needed. Results and details of the interpretation of results will be discussed in a large group before the end of the session.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Review authors
Level of knowledge required: Intermediate
Type of workshop: Training

Digital data collection for rigorous, randomised research

Facilitators: Herath N[1]
[1] *J-PAL Africa, South Africa*

Objectives: Participants will be exposed to the advantages of using digital data collection to design and implement randomised evaluations. Participants will be introduced to SurveyCTO, a platform which allows advanced survey features to be programmed on mobile devices and collect high-quality data. Participants will be exposed to innovative research design like randomised research protocols and questionnaire elements, built into digital forms.
Description: SurveyCTO is a flexible and secure digital data collection platform, widely used for running surveys in 130 countries, including by the Abdul Latif Jameel Poverty Action Lab (J-PAL). Digital data collection systems are increasingly used to implement randomised-controlled trials (RCTs), improve data quality and enforce research protocols. After some exposure to general principles of digital data collection, participants can expect to see how randomised research protocols can be built into digital forms in practice. Theory will be illustrated through two practical examples designed by J-PAL in South Africa, including a voter turnout experiment with randomised treatments and the execution of a popular neuropsychological test, the Stroop test using SurveyCTO. Those who bring laptops with them can get some practical exposure to digital form design using SurveyCTO but it is not required.

Category: Quality improvement methods and performance measures
Target audience: Researchers undertaking primary data collection with human subjects
Level of knowledge required: Intermediate

Type of workshop: Training

Systematic reviews of prognostic studies I: Design, protocol and data extraction

Facilitators: Moons C[1], Hooft L[2], Williams K[3]
[1] PhD, Netherlands; [2] Cochrane Netherlands, Netherlands; [3] University of Melbourne, Australia

Objectives: This workshop will introduce participants to the design, conduct, data extraction and critical appraisal in systematic reviews of prediction-modelling studies.
Description: We will discuss and provide guidance on how to define a proper review question and how to design your data-extraction form to enhance critical appraisal of primary prediction-modelling studies. We will illustrate this using real examples. Prediction models are developed and validated for predicting current or future occurrence of a particular outcome. Publications on prediction models are abundant. Hence, systematic reviews of these studies are increasingly required and conducted, to identify and critically appraise the existing evidence. Recently a tool has been developed to provide guidance for design and conduct of systematic reviews of studies developing and/or validating prediction models, that can assist reviewers to define the review objectives, to design the review and the data extraction list to facilitate appraisal of the primary studies. We discuss the key items important for framing the review question, and the domains with corresponding signaling items for data extraction and thus for critical appraisal. We discuss the CHARMS checklist; developed to assist reviewers in framing their review objective, to design their review, and to formulate their data-extraction list to facilitate critical appraisal of the primary studies on development and/or validation of prediction models.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Reviewers with an interest in systematic reviews of prognosis studies
Level of knowledge required: Basic
Type of workshop: Training

Making systematic reviews impactful through knowledge-translation strategies and tools

Facilitators: El-Jardali F[1], Fadlallah R[1], Lotfi T[2], Bou-Karroum L[3], Akl E[3], Hemadi N[3], Darzi A[3]
[1] American University of Beirut , Lebanon; [2] Global Evidence Synthesis Initiative (GESI) , Lebanon; [3] American University of Beirut, Lebanon
The Global Evidence Synthesis Initiative (GESI) was launched to enhance capacity to undertake evidence syntheses and support their use in low- and middle-income countries (LMICs) and is hosted by the Centre for Systematic Reviews on Health Policy and Systems Research (SPARK) at the American University of Beirut. This workshop is in collaboration with the Knowledge to Policy (K2P) Center at the American University of Beirut. K2P is a WHO collaborating center for Evidence-Informed Policy and Practice.
Objectives: To understand the role of systematic reviews in evidence-informed policy making; To familiarise participants with commonly used Knowledge Translation (KT) strategies and tools to package research evidence and support its use in policy decision making; To understand how to apply different KT products to promote evidence-informed policy making.
Description: • Short interactive presentation on policy making and role of policy-relevant systematic reviews (10 minutes); • Short interactive presentation on existing KT approaches, tools and platforms to promote use of evidence in policy making (10 minutes); • Hands-on exercise on selected KT products (Evidence Briefs for Policy, Briefing Notes, Rapid Response Products, Support Summaries, and Media Bites) (60 minutes): o Identifying the characteristics of selected KT products, how they differ from systematic reviews and from each other, and their applicability; • Reflections and group discussions (10 minutes).

Category: Evidence tools for policy makers and civil society
Target audience: Evidence Synthesis teams

Level of knowledge required: Basic
Type of workshop: Training

Making the best use of limited resource: An introduction to health economics in guidelines

Facilitators: Maconachie R[1]
[1] *NICE, United Kingdom*

Objectives: To develop an understanding of the principles and methods of economic evaluation for decision making in the development of NICE guidelines.
Description: By the end of the session, participants should understand the following key concepts: Scarcity, opportunity cost and the role of economic evaluation in efficient resource allocation; The importance of perspective to the estimation of costs and benefits; The meaning and role of the Quality Adjusted Life Year (QALY) as a measure of health outcome; The importance of incremental analysis (ICERs and net-benefits); The meaning and role of NICE's cost per QALY decision threshold. Participants should also gain a preliminary understanding of some simple methods of analysis. By the end of the session, they should be able to: Estimate costs from simple resource use and unit cost data; Estimate QALYs from simple quality-of-life and survival data; Calculate an Incremental Cost-Effectiveness Ratio (ICER) from cost and outcome data. Teaching mode: Key concepts will be introduced in a series of short talks (10-15 mins). Between presentations, participants will split up into small groups to do exercises, which will illustrate the key concepts and methods of analysis.

Category: Global health, equity, social and economic policy and practice
Target audience: Non-economists involved in the production of guidelines or healthcare decision-making.
Level of knowledge required: Basic
Type of workshop: Training

Live the Trial: Interactive method for teaching and learning trial design and risk-of-bias assessment

Facilitators: Baker P[1], Dobbins M[2]
[1] *QUT Brisbane & Cochrane Public Health, Australia;* [2] *National Collaborating Centre for Methods and Tools, Canada*
Other Contributors:

Francis D[1], Cathcart A[2]

[1] SPH&SW Queensland Univerisity of Technology, Australia
[2] QUT Business School, Australia

Objectives: • Learn a fun way to illustrate trial design and risk-of-bias (ROB) assessment. • See demonstrated and experience the use of interactive wireless voting technology for active learning and data collection. • Provide participants with ideas for teaching ROB concepts in their own settings.
Description: In this workshop, attendees will have the opportunity to participate in 'Live the Trial', a mock randomised-controlled trial. The participants will see a demonstration of the steps of a mock RCT using candy to increase happiness. Interactive wireless voting technology will be employed to demonstrate the capture of data and facilitate direct participation. Throughout the workshop the risks of bias which can creep into a study will be explored, and to some extent experienced. Participants in previous 'Live the Trial' sessions have reported increased confidence in the identifying the risks of bias and steps of a randomised-controlled study. They have also reported the use of interactive voting to be helpful in their learning.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: authors, researchers, provision of teaching and learning

Level of knowledge required: Basic
Type of workshop: Training

Finding lost trials together using Cochrane Crowd and the Evidence Pipeline

Facilitators: Noel-Storr A[1], Thomas J[2], McDonald S[3]
[1] University of Oxford, United Kingdom; [2] EPPI-Centre, UCL, London, United Kingdom; [3] Cochrane Australia, Australia

Objectives: 1. To outline the technical and methodological features of a pipeline that identifies research for systematic reviews – as soon as it is published. 2. For participants to have the opportunity to try some of the technologies described. 3. To promote discussion about the methodological and procedural issues this work raises.
Description: It is currently very time-consuming to find relevant studies for inclusion in systematic reviews. With ever-increasing volumes of research published each year, the problem of the data deluge is increasing. This workshop will open with a short introduction to two of the technologies developed as part of the 'Transform' project: i.e. the 'evidence pipeline' and 'Cochrane Crowd' platforms. Centralised searches will be conducted, and new citations fed into a machine-learning platform. Automatic categorisation will determine the probability that a given citation is a randomised-controlled trial and to which review/review group it is relevant. The Cochrane Crowd will then confirm/disconfirm the machine judgements creating a globally unique register of trials. After a short introduction to the above technologies and processes, this workshop will facilitate the guided engagement of participants in trialling the online platforms. It will use this experience to kick-start a facilitated discussion regarding the methodological and organisational issues the new technologies raise.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Systematic reviewers and information specialists
Level of knowledge required: Basic
Type of workshop: Training

Addressing multimorbidity in or beyond guidelines

Facilitators: Burgers J[1], Kunnamo I[2]
[1] Dutch College of General Practitioners, Netherlands; [2] Duodecim Medical Publications Ltd., Finland
Other Contributors:

Boyd C[1]

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Background: Providing high-quality care for patients with multimorbidity is challenging. Clinical practice guidelines focus on single diseases and may contain conflicting recommendations if applied to patients with multiple conditions. While guidelines can address multimorbidity to a greater extent, more attention could also be paid to the appropriate use of guidelines in practice, considering reasons for not following specific recommendations in guidelines based on specific individual circumstances.
Objectives: - To present one patient case from clinical practice illustrating the dilemma (see attachment). - To exchange knowledge, experiences, and potential solutions with participants of the workshop. - To define general principles and opportunities for guideline developers and users in addressing multimorbidity in clinical practice.
Description: - Introduction (10 min) - Presentation of patient case (10 min) - Participants will break into small groups and will be asked to define potential solutions for improving guidelines and suggestions to optimise care for patients with multimorbidity. (40 minutes). - Plenary feedback, conclusions and recommendations (30 minutes).

Category: Guideline development, adaptation, assessment and updating
Target audience: Guideline developers, implementers, guideline users and researchers.
Level of knowledge required: Intermediate
Type of workshop: Discussion

Concurrent Session B

Patient and stakeholder involvement in systematic reviews: Exploring the possibilities

Facilitators: Orr N[1], Garside R[2], Thompson Coon J[2], Rogers M[1]
[1] University of Exeter, United Kingdom; [2] University of Exeter Medical School, United Kingdom

Objectives: To present examples of systematic reviews which have involved different consumers and patient groups (older people, young people, charities, clinicians) throughout the review and dissemination process; to illustrate a range of activities and approaches; and, to facilitate group work to explore possibilities to ensure meaningful activity for both reviewers and stakeholders.
Description: We will describe our experiences of working closely with consumers and patient groups to elicit relevant questions that they want to know the answer to, and then working with them throughout the process to eventual creation and communication of relevant messages. Participants will then have the opportunity to work through examples/scenarios to think about who should be involved and how. Participants can bring a review they are working on or we will provide examples for session. Challenges and benefits will be considered. Workshop plan: Introduction and Aims (5 mins) Brief sharing of participant experience on user involvement (10 mins) Presentation of examples from 3 different reviews (15 mins) Feedback and discussion (10 mins) Group work would they have scenarios/examples (45 mins) Round up and discussion (15 mins)

Category: Consumer and patient involvement in syntheses
Target audience: Review authors
Level of knowledge required: Basic
Type of workshop:

Developing an effective search strategy for systematic reviews and other evidence syntheses

Facilitators: Lefebvre C[1], Coles B[2], Mann M[3], Weightman A[3]
[1] Cochrane Information Retrieval Methods Group, United Kingdom; [2] Cardiff University , United Kingdom; [3] Cardiff University, United Kingdom

Objectives: To provide guidance for researchers and practitioners on constructing an advanced search strategy for a systematic review or other evidence synthesis.
Description: Search strategies for evidence syntheses should aim to be comprehensive, that is, they should aim to identify all relevant research studies for a focused question. This workshop session is aimed primarily at evidence-synthesis researchers and practitioners who are not professional information specialists. Topics to be covered will include: • The role of the information specialist in supporting evidence syntheses; • Developing a focused research question; • Identifying important concepts within the question; • Translating the question into a search strategy; and, • Constructing a search strategy using advanced search techniques (the system to be used for demonstrations will be PubMed). This will include examining the importance of using database thesaurus terms in addition to free-text terms, using Boolean operators (AND, OR and NOT) to combine terms and sets of terms, truncation, and other key features vital for developing an effective search strategy. The workshop will consist of presentations, demonstrations, group work and discussion. A handout describing a range of widely available databases and tips for translating searches between databases and service providers/search interfaces will also

be provided. Participants should bring their own laptops for short exercises.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Authors of evidence syntheses, researchers and others interested in this topic.
Level of knowledge required: Basic
Type of workshop: Training

Issues in interpreting and presenting patient-reported outcomes in Cochrane reviews

Facilitators: Guyatt G[1], Patrick D[2]
[1] McMaster University, Canada; [2] University of Washington, USA
Learning objectives: 1) List the different alternatives for aggregating across different patient reported outcome (PRO) instruments measuring the same construct as presented in summary of findings tables in Cochrane reviews. 2) Choose an alternative for preparing the summary of findings table.
Description: This workshop will use interactive lecture and small group discussion to address the challenges and potential solutions in analysing and making PROs readily understandable to the audience of Cochrane reviews. These challenges involve making decisions on interpreting magnitude of effect (are differences trivial, small but important, or large). We will introduce approaches to aggregating across different instruments measuring the same construct including the standardised mean difference (the most commonly used approach) and more satisfactory alternatives. Some of these alternatives are based on the concept of the minimal important difference (MID: the smallest difference that would motivate a patient to use an intervention), and allow the dichotomisation of continuous outcomes (e.g. the proportion of patients who achieve a MID). During the workshop issues will arise for discussion in breakout group. At the end of each of these breakout sessions each group will report back with the group's conclusions. This workshop will prepare participants for a second workshop that will focus on the application of presentations approaches that rely on the MID.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors
Level of knowledge required: Intermediate
Type of workshop: Training

How to do knowledge translation without money

Facilitators: Kunz R[1], Hoving J[2], Kiekens C[3], Negrini S[4], Weida-Cuignet R[5], Ruotsalainen J[6]
[1] Evidence-based Insurance Medicine, Switzerland; [2] Coronel Institute for Occupational Health, Academic Medical Center, Netherlands; [3] Physical and Rehabilitation Medicine, University Hospitals Leuven, Belgium; [4] University of Brescia - Don Gnocchi Foundation, Milan, Italy; [5] University Hospital Basel, Switzerland; [6] Cochrane Work/ Finnish Institute of Occupational Health, Finland

Objectives: 1) Share ways to do knowledge translation at the minimum possible cost; 2) Inspire participants to try new approaches for knowledge translation; 3) Foster networking;.
Description: For non-profit organisations funding is often limited. Still Fields and Centres must and Reviews Groups should also engage in knowledge-translation activities. In this workshop we invite professionals who are active in knowledge translation and need to do so with limited resources. We want to share our own experiences and facilitate an exchange of ideas among participants about how to make the most of what you have. We want to collect ideas for knowledge translation which are, e.g. easy to put into practice, creative, or do not require large amounts of resources. We will rank the collected approaches in a matrix according to money and time required. This will be mailed to participants after the workshop and can serve as a decision aid for future knowledge translation efforts. The degree of your experience is not important – we would welcome a mix of experienced and

less-experienced people, bringing different approaches and ideas to the discussion.

Category: Advocating for evidence
Target audience: People who (want to) do knowledge translation and have only little resources (time, money and staff).
Level of knowledge required: Basic
Type of workshop: Discussion

A practical workshop on how to use QUADAS-2 in a systematic review

Facilitators: Whiting P[1], Reitsma H[2], Leeflang M[3]
[1] University of Bristol, United Kingdom; [2] University Medical Center Utrecht, Netherlands; [3] Academic Medical Center, University of Amsterdam, Netherlands

Objectives: To introduce QUADAS-2 and provide practical guidance on how to use the tool to assess the quality of diagnostic test accuracy (DTA) studies.
Description: The workshop will be split into two sessions: Introduction to QUADAS-2: The first session will be a brief overview of the content and structure of QUADAS-2. We will discuss potential sources of bias and applicability concerns in DTA studies. We will explain how the tool is structured and how it should be used to assess the quality of DTA studies included in a systematic review. Applying QUADAS-2 The second session will provide participants with the opportunity to apply QUADAS-2 to an example DTA study. We will split participants into smaller groups and each group will assess the example study according to one or two of the QUADAS-2 domains. We will then regroup to feedback the results of the assessment to the wider group and to discuss any issues that arose during the assessment process.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors, in particular those working on or interested in conducting DTA reviews; open to all Colloquium participants
Level of knowledge required: Intermediate
Type of workshop: Training

Screening evidence for systematic reviews using a text-mining system: The RobotAnalyst

Facilitators: Nolan K[1], Ananiadou S[2], Le Pogam M[3], Von Elm E[4], Przybyła P[5]
[1] NICE, United Kingdom; [2] School of Computer Science, University of Manchester, United Kingdom; [3] Cochrane Switzerland, Institute of Social and Preventive Medicine, Lausanne University Hospital, Lausanne University, Switzerland; [4] Cochrane Switzerland, Switzerland; [5] National Centre for Text Mining, University of Manchester, United Kingdom
Other Contributors:

Mcleod C[1]

[1] NICE, UK

Objectives: •Describe experiences and difficulties of screening evidence for populating systematic reviews for public-health topics. •Provide an overview of text-mining methods and demonstrate a system developed by the National Centre for Text Mining to support screening: the RobotAnalyst. •Present results of an evaluation of RobotAnalyst for a number of systematic reviews. •Explore the wider potential benefits of Robot Analyst for supporting evidence synthesis for guideline development.

Description: Text-mining methods have the potential to reduce time and costs for the development of evidence reviews. The workshop will be structured into four parts: 1) A general discussion of the challenges of searching and screening evidence for public health systematic reviews. 2) An overview of text-mining methods and a demonstration of the Robot Analyst. This is a bespoke application developed to support the evidence-review process for the development of public-health guidelines. 3) Presentation of results from NICE and Cochrane Switzerland on the evaluation of the system. Results will be presented on the potential time savings, specificity of the text-mining functionality and value of additional features in the system for the generation of evidence reviews. 4) An interactive discussion on the transferability of text-mining functionality beyond public health including a international panel of experts who will take questions and comments from participants.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Guideline developers, systematic reviewers and researchers
Level of knowledge required: Basic
Type of workshop: Discussion

Assessing confidence in qualitative evidence used in guidelines: Benefits and challenges when applying GRADE-CERQual

Facilitators: Thornton J[1], Shaw B[2], Lewin S[3], Munthe-Kaas H[4], Tunçalp Ҳsup>5
[1] National Institute for Health and Care Excellence, United Kingdom; [2] NICE, United Kingdom; [3] Cochrane EPOC, Cochrane Norway, Norwegian Institute of Public Health, South African Medical Research Council, Norway; [4] Norwegian Institute of Public Health, Norway; [5] World Health Organization, Switzerland
Other Contributors:

Glenton C[1]

[1] Norwegian Institute of Public Health, Norway

Objectives: To explore the advantages and challenges of applying GRADE-CERQual; To present experiences of applying GRADE-CERQual in guidelines; To explore what further guidance is needed; To collect feedback from users of GRADE-CERQual.
Description: To be presented by developers of the GRADE-CERQual approach and current users of GRADE-CERQual, including NICE and WHO and will be particularly relevant to guideline developers with some familiarity with qualitative evidence synthesis. A companion session at the Summit offers a fuller introduction to GRADE-CERQual. Large group presentation: Description of experiences from NICE and WHO, including perceptions of review authors and guideline committees. Discussions will address advantages of applying GRADE-CERQual, acceptability, practicalities, obstacles and challenges, strategies for overcoming these - what have we learnt that might help other users and what we might do differently in future? Small group discussions: Reflection on what issues might arise in participants' settings – attendees may bring their own examples of guidelines. For example, do they have people who are skilled in qualitative research/qualitative evidence syntheses? How familiar are their committees with different types of research and with GRADE? Are chairs trained in application of GRADE-CERQual? Feedback and closing remarks: Discussion of future plans for developing and using GRADE-CERQual and how feedback from this workshop will be used.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Intended for groups/individuals already using or considering use of GRADE-CERQual for assessing how much confidence to place in findings from qualitative evidence synthesis, particularly relevant for guideline developers.
Level of knowledge required: Intermediate

Type of workshop: Discussion

Systematic reviews of prognostic studies II: Assessing bias in studies of prognostic factors using the QUIPS tool

Facilitators: Moons C[1], Hooft L[2]
[1] PhD, Netherlands; [2] Cochrane Netherlands, Netherlands
Other Contributors:

Hayden J[1]

[1] Community Health and Epidemiology, Dalhousie University, Canada

Objectives: The QUality In Prognosis Studies (QUIPS) tool is useful and reliable to assess risk of bias in studies of prognostic factors. This workshop will introduce participants to paper and MS Excel versions of the QUIPS tool. We will discuss the development of the tool, and participate in exercises to apply and interpret the tool.
Description: Prognosis is a description of the probable course of individuals with a health condition. Important to prognosis is consideration of factors that are associated with or determine the course of the health condition. Critical appraisal of prognostic studies is challenging, but essential to assess and identify biases sufficiently large to distort study results. The QUIPS tool supports a systematic appraisal of bias in studies of prognostic factors. It is based on recommendations from a comprehensive review of critical appraisal in prognosis reviews and is informed by epidemiologic principles. Versions of the tool have been successfully used by several research groups with moderate/substantial interrater reliability. Six important areas to evaluate validity prognostic factor studies are considered: participation, attrition, prognostic factor measurement, confounding measurement and account, outcome measurement, and analysis and reporting; the tool includes prompting items related to these six areas with suggestions for operationalization and grading. Participants will gain understanding and experience using the tool.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Reviewers with an interest in systematic reviews of prognostic factor studies
Level of knowledge required: Basic
Type of workshop: Training

Evidence-Based Practice: Bridging the gap between science and practice

Facilitators: Borra V[1], Avau B[2], Van Remoortel H[3]
[1] Centre for Evidence-Based Practice, Belgian Red Cross, Belgium; [2] Centre for Evidence-Based Practice, Belgian Red Cross/Cochrane Belgium, Belgium; [3] Centre for Evidence-Based Practice (CEBaP), Belgium
Other Contributors:

De Buck E[1], Vandekerckhove P[2]

[1] Centre for Evidence-Based Practice, Belgian Red Cross, Mechelen, Belgium; Department of Public Health and Primary Care, Faculty of Medicine, KU Leuven, Leuven, Belgium
[2] Belgian Red Cross, Mechelen, Belgium; Department of Public Health and Primary Care, Faculty of Medicine, KU Leuven, Leuven, Belgium; Faculty of Medicine and Health Sciences, Ghent University, Ghent, Belgium

Objectives: The objective of this workshop is to give an introduction to evidence-based practice (EBP). Participants will learn the philosophy and different steps of the methodology of EBP in an interactive way. The

workshop includes individual exercises, small group exercises, quizzes and group discussions. This workshop is aimed at people with little or no experience in EBP.
Description: In a first part of the workshop, the philosophy of EBP will be explained. The 3 dimensions of EBP and their importance will be emphasised, using a practical example and a quiz (20 min). In a second part, the different steps of EBP will be outlined: 1) Formulating a PICO question: participants will make individual exercises on formulating a PICO question (10 min). 2) Searching for the best-available evidence: where to find information? How to create a search strategy based on the PICO question? Participants will learn about the set-up of a randomized controlled trial in small groups with a game-based exercise (25 min). 3) Making an overview: participants will try to recognise the different parts of an evidence review (10 min). 4) The importance of contextualisation will be explained based on examples on the development of evidence-based African First Aid Guidelines and Materials (15 min). In a final part, a group discussion will be held about the advantages and limitations of EBP and some take home messages will be listed (10 min).

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Anyone who wants to (1) learn about the basic principles of Evidence-Based Practice (EBP), (2) apply EBP in practice, (3) find out how EBP can bridge the gap between science and practice, or (4) know the advantages and limitations of EBP.
Level of knowledge required: Basic
Type of workshop: Training

A new instrument to assess Risk of Bias in Non-randomised Studies of Exposures (ROBINS-E): Application to studies of environmental exposure

Facilitators: Morgan R[1], Sterne J[2]
[1] McMaster University, Canada; [2] University of Bristol, UK, United Kingdom
Other Contributors:

Higgins J[1], Thayer K[2], Schunemann H[3], Rooney A[4], Taylor K[4]

[1] University of Bristol, UK
[2] Environmental Protection Agency, USA
[3] McMaster University, Canada
[4] National Institute for Environmental Health Sciences, USA

Objectives: To introduce a new tool for assessing risk of bias in non-randomised studies of exposures, and illustrate its application to studies of environmental and occupational exposure.
Description: Systematic reviews should include rigorous risk-of-bias assessments of included studies. We are adapting the recently published ROBINS-I instrument (for risk of bias in non-randomised studies of interventions) to address non-randomized studies of exposures other than interventions, including environmental and occupational exposures. This workshop will present an overview of the adapted instrument (to be named ROBINS-E), and will explain the proposed changes to ROBINS-I that will make ROBINS-E more suitable for assessing studies of exposures). Key aspects include preliminary consideration of risk of bias within the review protocol, use of signaling questions to inform risk-of-bias judgments, specification of a 'target experiment', detailed assessments of confounding and exposure measurement error, and guidance for interpretation across a body of evidence. There will be a hands-on exercise to apply the draft ROBINS-E instrument to individual studies of a specific environmental exposure. The workshop will conclude by making a study-level risk-of-bias judgment, and discuss considerations when using ROBINS-E to assess individual studies to inform a systematic review, including making an overall risk-of-bias judgment across a body of evidence for a specific outcome.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)

Target audience: Review authors, researchers, and guideline developers
Level of knowledge required: Intermediate
Type of workshop: Training

Concurrent Session C

Introduction to the new guidance for plain-language summaries for Cochrane diagnostic test accuracy reviews

Facilitators: Whiting P[1], Leeflang M[2], Mustafa R[3], Santesso N[4]
[1] University of Bristol, United Kingdom; [2] Academic Medical Center, University of Amsterdam, Netherlands; [3] University of Kansas Medical Center, USA; [4] Cochrane Canada, GRADEing Methods Group, McMaster University, Canada
Other Contributors:

Davenport C[1]

[1] University of Birmingham, United Kingdom

Objectives: To introduce and provide training on how to use the new plain-language summary (PLS) template and guidance;
Description: The workshop will be split into two sessions: Introduction to the new PLS template: The first session will be a brief overview of the process used to develop the PLS template and guidance. We will present the final version of the proposed PLS guidance and illustrate how to apply it using an example PLS based on a review of the IQCODE test for diagnosing dementia. Piloting the new PLS template and guidance The second session will provide participants with the opportunity to apply the new template to an example review. We will split participants into smaller groups and each group will take sections of an existing review and translate these into plain language using the new template and guidance. We will then regroup to feedback the results to the wider group and to discuss any issues that arose during the process.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Review authors and consumers
Level of knowledge required: Intermediate
Type of workshop: Training

Becoming a systematic review editor or peer reviewer for journals

Facilitators: Lindsley K[1], Li T[2]
[1] UMC-Utrecht and Cochrane Eyes and Vision US Satellite, USA; [2] Cochrane United States & Cochrane Eyes and Vision US Project, USA
Other Contributors:

Dickersin K[1]

[1] Cochrane Eyes and Vision, USA

Objectives: To provide training and guidance for people who want to serve as systematic review editors or peer reviewers for journals as a mechanism for improving the quality of systematic reviews. We will present and discuss our experience in Cochrane Eyes and Vision (CEV) as an example.
Description: We will complete a hands-on exercise to demonstrate common issues encountered during the editorial and peer-review process. Participants will work in small groups to critically appraise excerpts from manuscripts of systematic reviews. Together, we will work to identify useful approaches for summarizing and

communicating comments so as to be helpful to authors and editors. Exercise materials will be made available for those registered prior to the workshop in order to facilitate discussion of issues. For discussion, we will present our experience of having CEV editors serve as systematic-review editors and peer reviewers for specialty journals in eyes and vision. We will share the expectations, challenges, and benefits that we have come across while engaging in partnerships with journals. We will introduce and provide participants with useful tools for assessing the quality of systematic reviews, such as the MECIR, ROBIS, PRISMA, and AMSTAR checklists, and links to web-based training.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Individuals who are involved or interested in serving as a systematic review editor or peer reviewing for journals
Level of knowledge required: Intermediate
Type of workshop: Training

Introduction to RevMan Web

Facilitators: Van Valkenhoef G[1], Sambunjak D[2], Cumpston M[3]
[1] Cochrane IKMD, Denmark; [2] Learning & Support Department, Cochrane Central Executive Team, Croatia; [3] Cochrane Central Executive Team, Australia

Objectives: - Users will learn first-hand how to use RevMan Web to write an intervention review; - Users will understand how RevMan Web differs from RevMan 5; - Users will understand how RevMan Web fits with other tools such as Covidence, EPPI-Reviewer and GRADEpro as part of Cochrane's review ecosystem; - Users will learn about the RevMan Web's development roadmap.
Description: This workshop is intended for newcomers to RevMan Web. RevMan (Review Manager) is the software used to prepare and maintain Cochrane Reviews, and is also available to other review authors. RevMan Web is the first major redesign of this software since 2008 and it's entering Beta in 2017. This workshop offers the opportunity to learn first-hand how to use the software to prepare an intervention review. Users will be guided through a hands-on exercise to demonstrate the systematic review writing process using RevMan Web, including interactions with complementary tools, and understand how this differs from the existing RevMan 5 software. We will cover the future development roadmap of RevMan Web and how both versions of RevMan will operate within the Cochrane review ecosystem and complement each other for the foreseeable future. Note: Participants should bring their own laptop or tablet to participate in the hands-on session, or will be able to share with other participants.

Category: Synthesis creation, publication and updating in the digital age
Target audience: For authors and group staff who haven't yet tried RevMan Web
Level of knowledge required: Basic
Type of workshop: Training

Assessing risk of bias in randomised studies: RoB 2.0

Facilitators: Sterne J[1], Elbers R[2]
[1] University of Bristol, UK, United Kingdom; [2] University of Bristol, United Kingdom
Other Contributors:

Higgins J[1], Reeves B[1], Hróbjartsson A[2], Boutron I[3]

[1] University of Bristol, United Kingdom
[2] Syddansk Universitet, Denmark
[3] Paris Descartes University, France

Objectives: To gain experience using the revised Cochrane Risk-of-Bias tool (RoB 2.0) to assess risk of bias in randomised trials.
Description: Randomised trials (RCTs) provide evidence about the effects of healthcare interventions. However, results can be undermined by flaws in design, conduct, analyses and selective reporting. Therefore, systematic reviews typically include assessments of the validity of the included RCTs. We will present the revised Cochrane Risk-of-Bias tool (RoB 2.0). The tool includes signalling questions and algorithms to help review authors judge the risk of bias arising from the randomisation process, bias due to deviations from intended interventions, bias due to missing outcome data, bias in the measurement of the outcome, and bias in the selection of the reported result. The workshop will cover: - The importance of specifying the result of interest to be assessed; - Guidance on specifying the effect of interest (that of assignment to intervention, or starting and adhering to intervention); - Signalling questions and algorithms to inform risk-of-bias judgment; - Guidance on reaching an overall risk-of-bias judgment for the assessed result. A worked example will be used to provide hands-on training and facilitate discussion. Participants have the option to complete their assessments in a semi-automated Excel template, and are encouraged to bring their own portable device to access detailed guidance from the internet (www.riskofbias.info)

Category: Real world evidence (pragmatic trials, big data)
Target audience: Systematic review authors, Clinical trialists
Level of knowledge required: Basic
Type of workshop: Training

Individualising quantitative benefit-harm assessments

Facilitators: Aschmann H[1], Robbins C[2]
[1] Epidemiology, Biostatistics and Prevention Institute, University of Zurich , Switzerland; [2] Kaiser Permanente-The Permanente Federation, USA
Other Contributors:

Puhan M[1]

[1] Epidemiology, Biostatistics and Prevention Institute, University of Zurich, Switzerland

Objectives: In this interactive workshop participants will be introduced to quantitative benefit-harm assessments. With the help of two examples from real-life studies, about primary prevention of cardiovascular diseases and second line treatment in diabetes type-2, participants will learn how evidence for benefit harm analysis is selected and how the benefit harm balance can be individualised.
Description: Quantitative benefit-harm assessments (BHA) rely on evidence synthesised in systematic reviews. They can inform patients and clinicians about treatment decisions. BHA is influenced by three key determinants: The baseline risk, treatment effect and importance of outcomes. Evidence for these key determinants should be carefully selected. While the first BHA were based on population levels, methods have been developed to individualise the benefit-harm balance. For personalised benefit-harm balance to be determined from aggregated data, baseline risks that best reflect the characteristics of the person can be selected. Moreover, effect modification can be considered and treatment effect estimates thus adjusted. Finally, the individual preferences for health outcomes can be incorporated. In this workshop we will introduce individualised BHA. With real-world examples and discussions, we will reflect on the use of aggregated evidence in BHA.

Category: Evidence tools for consumers and to promote shared decision making
Target audience: Researchers
Level of knowledge required: Basic
Type of workshop:

Using machine learning to automate data extraction from RCTs — hands on with RobotReviewer

Facilitators: Marshall I[1], Kuiper J[2], Wallace B[3]
[1] King's College London, United Kingdom; [2] Doctor Evidence, Netherlands; [3] Northeastern University, USA

Objectives: This workshop will examine the use of RobotReviewer to make the data-extraction stage of systematic reviews more efficient via semi-automation. We will provide hands-on experience with the tool, and lead discussion of the methodological implications of using semi-automated approaches to support systematic reviews.
Description: RobotReviewer is a system that uses machine learning to automate data extraction and synthesis from clinical trial reports. Currently, RR is capable of automatically extracting information on study design, characteristics of the population, interventions, and outcomes, and assessing risks of bias. In this workshop, we will introduce RobotReviewer and demonstrate its use in practice for producing both semi-automated (wherein a human checks the generated output) and fully automatic evidence summaries. We will describe the underlying methods for automation, and we will use examples to explore the impact this can have on real-world use. Finally, we will discuss barriers and solutions to using automation in practice. We will additionally present a pilot study of RobotReviewer, which will enable participating review authors to evaluate the tool's usability, and receive real-time feedback on accuracy and time taken on their particular project. Participants should bring a laptop. Participants actively working on a systematic review or guideline are encouraged to bring along some example clinical trial PDFs to try out with RobotReviewer.

Category: Synthesis creation, publication and updating in the digital age
Target audience: Anyone involved in the creation of systematic reviews, rapid reviews, or guidelines
Level of knowledge required: Intermediate
Type of workshop:

Integrating patient outcome importance in guideline development: Patient Outcome Importance Workshop I

Facilitators: Zhang Y[1], Pardo-Hernandez H[2], Yepes-Nuñez J[3], Guyatt G[1], Schunemann H[1]
[1] McMaster University, Canada; [2] Iberoamerican Cochrane Centre, Spain; [3] Health Research Methodology program at McMaster University, Canada

Objectives: To discuss strategies to incorporate outcome importance in guideline panels and to explore the appropriate presentation format for outcome importance evidence.
Description: This is the first of a two-workshop series on patient outcome importance. It is crucial that guideline developers consider how patients or those affected by clinical decision-making value the main outcomes associated with alternative patient management strategies. This includes determining the typical importance or values for each outcome under consideration, the variability observed, and the quality of the available evidence. In this workshop we will discuss these aspects in depth using examples. Sessions will be interactive combining short presentations and small group work. In the presentation, we will provide guidance on how to interpret evidence profiles to present this type of evidence. This includes an overview on how to rate the certainty of the evidence and how to assess variability in values. In the small groups we will present a new tabulated format (e.g. summary of findings table) that participants will have the opportunity to assess.

Category: Guideline development, adaptation, assessment and updating
Target audience: Guideline and systematic review developers, methodologists, or anyone interested in discussing this topic.
Level of knowledge required: Intermediate
Type of workshop: Training

Undertaking a systematic review addressing a question of prevalence

Facilitators: Munn Z[1], Aromataris E[2], TUFANARU C[3]
[1] Joanna Briggs Institute, The University of Adelaide, Australia; [2] Joanna Briggs Institute, University of Adelaide, Australia; [3] The Joanna Briggs Institute, The University of Adelaide, Australia; , Australia

Objectives: The objectives of this workshop are the following: • To introduce the Joanna Briggs Institute approach to systematic reviews of prevalence; • To provide an overview of the steps involved in a systematic review of prevalence; • To discuss software for systematic reviews of prevalence; • To provide participants with hands on experience with assessing risk of bias in prevalence studies.
Description: Prevalence systematic reviews and meta-analysis is an emerging methodology in the field of evidence synthesis. These reviews can provide useful information for healthcare professionals and policymakers on the burden of disease, show changes and trends over time in disease, and inform geographical distributions of disease and conditions. Currently, there is only limited guidance for authors aiming to undertake systematic reviews addressing questions of prevalence. A methodological working group of the Joanna Briggs Institute was formed to create guidance for conducting systematic reviews of studies reporting prevalence and cumulative incidence information. Systematic reviews of prevalence data should follow the same structured steps as systematic reviews of effectiveness. However, many of these steps need to be tailored for this type of evidence, particularly surrounding the stages of critical appraisal and synthesis (meta-analysis). This workshop will discuss some of these adapted steps and provide hands-on experience for participants.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Systematic reviewer authors and guideline developers
Level of knowledge required: Intermediate
Type of workshop: Training

Effective stakeholder engagement is beneficial to research – but HOW do you do it? Practical guidance and resources for authors, editors and researchers to support successful stakeholder involvement in systematic reviews

Facilitators: Campbell P[1], Morley R[2], Synnot A[3]
[1] NMAHP Research Unit, Glasgow Caledonian University, United Kingdom; [2] Cochrane, United Kingdom; [3] Cochrane Consumers and Communication and Cochrane Australia, Australia
Other Contributors:

Pollock A[1], Goodare H[2], Struthers C[3], Hill S[4], Nunn J[4], Morris J[1]

[1] Glasgow Caledonian University, United Kingdom
[2] Consumer contributor, United Kingdom
[3] University of Oxford, United Kingdom
[4] La Trobe University, Australia

Objective: Effective stakeholder engagement is a commitment of Cochrane, widely mandated & expected by research funders and users. We will provide practical learning and resources for authors, managing editors, co-editors, researchers and others interested in stakeholder involvement, covering: -practical ways to involve stakeholders in reviews, including methods for involving people at different stages of a review; -Cochrane's new learning resources, supporting review authors and editorial staff to involve stakeholders.
Description: Introduction (10min). Introductions/brief background, including terminology around involvement and ways to describe different methods of involvement in reviews. 'One size does not fit all' (group exercise, 30 min). Written descriptions of different methods of involvement, based on real examples of reviews, will be

provided. Participants will explore, discuss & compare these examples. Participants will move around, actively interacting, exploring and comparing methods of involvement. Feedback (10 min). Groups will share key thoughts & findings from the exercise. ACTIVE demonstration (10 min): new Cochrane Learning resources relating to how to involve consumers in systematic reviews. ACTIVE group discussion (15 min): participants will explore the ACTIVE resources, identify features of importance to them, and discuss the implications of these resources to them within their role. Questions, answers, closing remarks (15 min).

Category: Consumer and patient involvement in syntheses
Target audience: This workshop will be specifically aimed at review authors, managing editors and co-editors, but the content will be of interest to a wider audience including anyone with an interest in consumer/stakeholder involvement in research.
Level of knowledge required: Intermediate
Type of workshop: Training

Concurrent Session D

Comparing multiple interventions workshop: Estimating treatment effects and evaluating the evidence from network meta-analysis

Facilitators: Nikolakopoulou A[1], Chaimani A[2]
[1] *Institute of Social and Preventive Medicine, University of Bern, Switzerland;* [2] *Research Center of Epidemiology and Statistics Sorbonne Paris Cité (CRESS-UMR1153), Paris Descartes University, France*
Other Contributors:

Higgins J[1]

[1] School of Social and Community Medicine, Bristol, UK

Objectives: To understand the statistical methodology of network meta-analysis and the assumption of consistency. To present a methodology that can be used to evaluate the credibility of evidence.
Description: This is the second of two workshops offered by the Cochrane Comparing Multiple Interventions Methods Group. The workshop will provide insight into network meta-analysis models that can be used to derive estimates for the relative effects of all treatments of interest. We will present approaches to check for and account for inconsistency in the results. It is important to consider the confidence with which produced treatment effects and treatment ranking can enable clinicians and decision makers to make informed decisions. We will present a framework based on the GRADE (Grading of Recommendations, Assessment, Development and Evaluations) system that can be used to evaluate the credibility of the results from network meta-analysis. Core aspects of the approach include considerations about the plausibility of the transitivity assumption underlying network meta-analysis and understanding the relative contributions of direct and indirect evidence. We will illustrate the process using networks of different size and complexity and we will show how a web application, CINeMA (Confidence In Network Meta-Analysis), simplifies the evaluation of the quality of NMA results with semi-automation of methods and via a guided on-line process.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Cochrane authors, editors, methodologists and statisticians
Level of knowledge required: Intermediate
Type of workshop: Training

Capacity building in conducting systematic reviews

Facilitators: Oliver S[1], Lotfi T[2], Akl E[3], El-Jardali F[4], Bou-Karroum L[3], Fadlallah R[4], Darzi A[3], Hemadi N[3]
[1] UCL EPPI-Centre, United Kingdom; [2] Global Evidence Synthesis Initiative (GESI) , Lebanon; [3] American University of Beirut, Lebanon; [4] American University of Beirut , Lebanon
Other Contributors:

Pullin A[1]

[1] Collaboration for Environmental Evidence, United Kingdom

The Global Evidence Synthesis Initiative (GESI) aims to build capacity in multidisciplinary evidence synthesis production and use in LMICs to impact practice and policy. The EPPI-Centre, at UCL, is a specialist centre for:developing methods for systematic reviewing and synthesis of research evidence; and for developing methods for the study of the use research.
Objectives: To learn about the multi-level research capacity building framework; To have the participants share their experiences and challenges in building capacity in conducting systematic reviews; To have the participants plan their future activities to build capacity in conducting systematic reviews following the proposed framework
Description: Introductory session: (20 min) Differentiate between the levels of capacity building: individual; team capacity; institutional capacity; Challenges from non-health fields when building capacity in conducting systematic reviews: (15 min) SPARK's experience in building capacity in conducting systematic reviews in health policy and systems research The Environmental Evidence Collaboration's experience in conducting systematic reviews in the environmental field Small groups for hands-on: (55 min) -Ask the groups to think about challenges they faced when building capacity in conducting systematic reviews; -Use the framework to plan capacity building activities in conducting systematic reviews that the participants can apply at the different levels.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Researchers
Level of knowledge required: Basic
Type of workshop: Training

Understanding context in evidence synthesis and guideline development – connecting global evidence and local needs

Facilitators: Lukersmith S[1], Zuiderent-Jerak T[2], Wieringa S[3], Shaw B[4]
[1] University of Sydney , Australia; [2] Linköping University, Sweden; [3] Oxford University & Oslo University, United Kingdom; [4] NICE, United Kingdom
Other Contributors:

Objectives: • To define context; • Explore where & how context should be considered; • Identify methodological challenges in context knowledge.
Description: Many sources of knowledge and reasoning are used in evidence synthesis and guideline development. This can include knowledge of context – understanding the situation in which something exists or happens, and what can explain it . Randomised-controlled trials (RCTs) typically focus on treatment effects, rather than context of evaluation & practice. So understanding context requires a range of evidence & knowledge from different sources & different approaches to reasoning. The session will take the form of an interactive workshop, allowing shared discussion and full participation from a range of disciplines & perspectives. Outline: 1) Introduction 2) Presentation – Why does context matter? The philosophical argument & varied - micro, macro, etc. - perspectives of context 3) Small group work with facilitators – Participants will discuss context & how this might influence effectiveness of interventions. 4) Key themes 5) Small group work with facilitators – Participants will be asked to consider when context is relevant to key stages of evidence synthesis and guideline development, and

how they might source evidence of context 6) Key themes 7) Methodological work 8) Close Please note, this workshop links with the special session on 'Global needs, local evidence; practical philosophy'.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Guideline and systematic review developers; users of guidelines and systematic reviews, including practitioners, health service consumers and policy makers.
Level of knowledge required: Basic
Type of workshop: Discussion

Qualitative synthesis with meta-aggregation: A practicum

Facilitators: Lockwood C[1], Munn Z[2]
[1] Cochrane Nursing Care, Australia; [2] Joanna Briggs Institute, The University of Adelaide, Australia
Other Contributors:

Stannard D[1], Salmond S[2], Bjerrum M[3], Carrier J[4]

[1] UCSF, USA
[2] Rutgers, USA
[3] Aarhus University, Denmark
[4] Cardiff University, Wales

Objectives: To be introduced to the principals and methods of meta-aggregation and software to guide and support qualitative systematic reviews (SUMARI). To gain introductory-intermediate level experience and knowledge in qualitative data management, including identifying qualitative data, establishing the credibility of qualitative data, synthesising qualitative data, using the meta-aggregative approach and in developing qualitative summary of findings tables. To increase understanding and experience in establishing rigor through appraisal, extraction and synthesis in qualitative systematic review.
Description: This workshop is suited to novice/intermediate participants and includes minimal didactics; participants must bring a wireless-enabled laptop. An introduction and overview of meta-aggregation for qualitative synthesis will be followed by a series of brief, practical sessions using JBI systematic review software. Sessions will include a brief introduction to the theory and methods followed by practical activities on identifying qualitative data, extracting qualitative data, rating extracted data with a level of credibility and synthesising qualitative data. Brief discussions will explore and illustrate the applicability of qualitative synthesis to evidence-based healthcare, and to informing recommendations for policy and practice. Attendees will use the JBI-SUMARI software and maintain access for a further 12 months.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: review authors, researchers, beginner to intermediate level
Level of knowledge required: Intermediate
Type of workshop: Training

The TRANSFER framework to assess transferability of systematic review findings

Facilitators: Munthe-Kaas H[1], Nøkleby H[1]
[1] Norwegian Institute of Public Health, Norway
Background: The TRANSFER Framework aims to help review authors: define the review scope/context of interest through structured dialogue with relevant decision makers; assess how well the context of included studies

matches the review scope/context of interest, and; assess the transferability of review findings to a particular context of interest.
Objectives: To engage in dialogue and gather feedback on the TRANSFER Framework in order to refine the guidance for systematic review authors.
Description: Participants will apply the TRANSER Framework to an example and to give feedback on the framework as a method for assessing transferability of review findings. The starting point for the discussion will be a brief presentation of the framework and the history of its development. We will then invite participants to give feedback on the components of the framework using a worked example. 1. Introduction to the TRANSFER framework (10 mins) 2. Small group work using a worked example to discuss the comprehensiveness and usability of the TRANSFER framework and the presentation of TRANSFER assessments (50 mins) 3. Plenary (20 mins) 4. Next steps (10 mins)

Category: Consumer and patient involvement in syntheses
Target audience: Review authors, systematic review and qualitative synthesis methodologists
Level of knowledge required: Intermediate
Type of workshop: Discussion

An introduction to rapid reviews: Developing timely evidence summaries for decision makers (A Cochrane Rapid Reviews Methods Group Workshop)

Facilitators: Garritty C[1], King V[2], Gartlehner G[3], Nussbaumer-Streit B[3], Stevens A[4]
[1] Ottawa Hospital Research Institute, Canada; [2] Center for Evidence-based Policy, USA; [3] Cochrane Austria, Austria; [4] Cochrane Rapid Reviews Methods Group, Canada

Objectives: Rapid reviews (RRs) are increasingly employed as a research-synthesis tool to support timely evidence-informed decision making. This introductory workshop offered by the Cochrane RRMG aims: 1) to introduce the concept of RRs as differentiated from traditional systematic reviews (SRs); 2) to impart an understanding of the utility of RRs as an evidence synthesis product, including their use in guideline recommendations and policy development; 3) to give an introductory overview of methodological approaches to RRs based upon streamlined Cochrane gold standard SR methodology; 4) to discuss challenges RRs present; and, 5) to inform participants about ongoing RR initiatives.
Description: This session will be a mix of presentations, and a small-group exercise. Specifically, attendees will do an exercise in which they will be asked to assess and discuss the attributes of a sampling of RRs produced by different organisations in order to emphasise the spectrum of possible approaches to RR conduct versus a one-size fits all approach. Potential technical issues related to RRs as well as logistical considerations, report layout and customisation, transparency, and involvement of decision-makers in the process will be discussed. Importantly, this session will emphasise the need to assess appropriateness in undertaking a RR while underscoring the importance of managing scope through various stages of the RR process.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Individuals with an interest in generating or understanding evidence from rapid reviews. The session is appropriate for those with a limited understanding in rapid review methodology.
Level of knowledge required: Basic
Type of workshop: Training

Common errors in meta-analysis – lessons and learning from the Cochrane review-screening programme

Facilitators: Bickerdike L[1], Cumpston M[2], Livingstone N[1], Opiyo N[3], Sambunjak D[4]
[1] Cochrane Editorial Unit, United Kingdom; [2] Cochrane Central Executive Team, Australia; [3] Cochrane, United Kingdom; [4] Learning & Support Department, Cochrane Central Executive Team, Croatia

Objectives: The objectives of this workshop are to highlight common statistical errors made in Cochrane systematic reviews, and to provide practical, hands-on guidance to help authors and editors address these errors.
Description: The Cochrane Editorial Unit (CEU) quality assurance team has been screening new reviews against key MECIR standards since September 2013. During the course of this work, it has become notable that many of the same errors frequently occur in the Data and Analysis section of the review. This can have a serious impact, as even the smallest statistical error can change the interpretation of the results. Examples of these common errors include data extraction errors, Unit of Analyses errors, and inappropriate methods of performing Subgroup Analyses. In addition, Cochrane's Learning and Support Department has worked in partnership with CEU to develop a suite of online learning resources to support editors in identifying and addressing common errors. The purpose of this workshop is to improve review authors and editor's awareness of these errors, thus helping them to identify, rectify, and ultimately avoid making these errors. The workshop will begin with a brief PowerPoint presentation, providing an overview of common errors and introducing the accompanying online materials. Following this, the attendees will work in small groups with the facilitators to identify errors in some real-life examples, and discuss the best way to rectify the issues.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors and editors
Level of knowledge required: Basic
Type of workshop: Training

Less is really more: How to reduce low-value care

Facilitators: Hooft L[1], Heus P[1], Van Dulmen S[2]
[1] Cochrane Netherlands, Netherlands; [2] Radboudumc, Netherlands
Other Contributors:

Kool T[1], Naaktgeboren C[2]

[1] Radboudumc, Netherlands
[2] UMC Utrecht, Netherlands

Objectives: Reducing low-value care improves quality of care and reduces waste of resources. However, achieving successful and sustainable de-implementation is difficult as several factors impede it. In this interactive workshop, participants will receive the tools to start their own de-implementation project. We will share knowledge based on two systematic reviews of de-implementation studies, and our experience from the Dutch national programme 'To do or not to do? Reducing low-value care'. Participants will become aware of the challenges they might encounter when designing and executing a de-implementation project and how to deal with those challenges.
Description: After an introduction on low-value care and de-implementation, participants will work on a de-implementation project in subgroups. For each of the stages of a de-implementation project the groups will receive a question or assignment to work on. The findings of each group will be discussed and we will share our own experiences. Topics covered during this workshop are: - Identifying and measuring low-value care in current practice; - Analysing reasons why low-value care persists and what potential barriers and facilitators to de-implementation may be; - Developing a tailored de-implementation strategy keeping identified barriers and facilitators in mind; - Executing a de-implementation strategy and evaluating its effectiveness; - Integrating changes in routine care to achieve sustainable change.

Category: Design and evaluation of dissemination and implementation programs
Target audience: Researchers, health care providers or quality improvement employees that are interested in learning how to set up a project to reduce low-value care.

Level of knowledge required: Basic
Type of workshop: Training

Synthesis of qualitative research findings: What are they, where are they and what should I do with them?

Facilitators: Garside R[1], Hannes K[2], Thomas J[3], Flemming K[4]
[1] University of Exeter Medical School, United Kingdom; [2] Cochrane Qualitative and Implementation Methods Group, Belgium; [3] EPPI-Centre, UCL, London, United Kingdom; [4] University of York, UK, United Kingdom

Description: Numerous methods exist for synthesising the findings of qualitative research. These range from aggregative methods, which aim to summarise existing findings across studies, to more interpretive approaches which aim to build new constructs from the evidence base. These different approaches use different strategies for extracting & synthesising research findings. Qualitative research findings are not always straightforward to identify and categorise. This workshop will help participants understand how to choose the right synthesis approach from the options available & to identify different types of findings. It is suitable for those with little or no experience of synthesising qualitative research.
Objectives: • to ontroduce the spectrum of approaches to qualitative evidence synthesis. • Offer guidance about which method to choose in different situations, including Cochrane reviews. • Introduce the different types of findings seen in qualitative research–such as participant quotes (first-order concepts); interpretations by the authors of primary research reports (second-order concepts) and conceptual models. • Discuss issues with 'finding the findings' in published examples of qualitative research. • Facilitate group work in which participants will work in small groups to: o identify and categorise different types of findings in research reports; o understand how to develop a thematic synthesis; o understand how to develop a meta-ethnography.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors with an interest in undertaking qualitative evidence synthesis
Level of knowledge required: Basic
Type of workshop: Training

Concurrent Session E

Systematic reviews of prognostic studies III: PROBAST – A risk-of-bias tool for systematic reviews of prediction-modelling studies

Facilitators: Moons C[1]
[1] PhD, Netherlands
Other Contributors:

Wolff R[1]

[1] Kleijnen Systematic Reviews Ltd, England

Objectives: Quality assessment of included studies is a crucial step in any systematic review. Review and synthesis of prediction-modelling studies is a relatively new and evolving area. The QUIPS tool is available for prognostic factor studies. However, a tool facilitating quality assessment for prediction-modelling studies, both for diagnostic and prognostic prediction models, is needed. We have developed PROBAST, a tool for assessing the risk of bias and applicability of all types of prediction-modelling studies. PROBAST assesses risk of bias and applicability of prediction-modelling studies. It consists of five domains (participant selection, outcome, predictors, sample size and flow, analysis) and 23 signalling questions across these domains.
Description: The workshop will be split into two sessions. The first session will give an overview of the

development and structure of PROBAST. We have used a Delphi process, including 42 experts in the field of prediction research. The presentation will give an overview of the process of development, the final version of the tool (including the domains covered and signaling questions) and guidance on how to use it. In the second half of the workshop, participants will have the opportunity to experience this new tool first hand and to discuss issues with the creators of PROBAST.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Authors conducting systematic reviews of prediction modelling studies
Level of knowledge required: Intermediate
Type of workshop: Training

The GRADE-CERQual approach for assessing how much confidence to place in findings from qualitative evidence syntheses

Facilitators: Munthe-Kaas H[1], Lewin S[2], Noyes J[3]
[1] Norwegian Institute of Public Health, Norway; [2] Cochrane EPOC, Cochrane Norway, Norwegian Institute of Public Health, South African Medical Research Council, Norway; [3] Qualitative and Implementation Methods Group, United Kingdom
Other Contributors:

Glenton C[1], Carlsen B[2], Booth A[3], Rashidian A[4], Garside R[5], Bohren M[6], Tuncalp O[6], Wainwright M[7]

[1] Norwegian Institute of Public Health, Norway
[2] Uni Research Rokkan Centre, Norway
[3] School of Health & Related Research (ScHARR), University of Sheffield, UK
[4] Information, Evidence and Research Department, Eastern Mediterranean Regional Office, WHO, Egypt
[5] European Centre for Environment and Human Health, University of Exeter Medical School, UK
[6] UNDP/UNFPA/ UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction, Department of Reproductive Health and Research, WHO, Switzerland
[7] Division of Social and Behavioural Sciences, School of Public Health and Family Medicine, University of Cape Town, South Africa

Objectives: Systematic reviews of qualitative studies (qualitative evidence syntheses) are increasingly used to bring together findings from qualitative studies. A number qualitative evidence syntheses are now published or under way. In order to use synthesised findings to inform decisions we need methods to assess how much confidence to place in these findings. The objective of this workshop is to introduce the GRADE-CERQual approach to assess Confidence in Evidence from Reviews of Qualitative research.
Description: The workshop will be facilitated by the GRADE-CERQual co-ordinating team. The workshop is intended for review authors who are using/planning to use GRADE-CERQual. Attendees should have some familiarity with qualitative research and evidence synthesis methods. This is not intended to be a basic training session. 1. Presentation: - The GRADE-CERQual approach: rationale and introduction - Using GRADE-CERQual to make an overall assessment of confidence in findings from qualitative evidence syntheses - Introduction to GRADE-CERQual Summary of Qualitative Findings tables 2. Group discussion and/or practical exercises for each CERQual component: (1) Assessing the methodological limitations of the individual studies contributing to a review finding (2) Assessing the coherence of each review finding (3) Assessing the relevance of studies contributing to a review finding (4) Assessing the adequacy of data supporting each review finding 3. Feedback

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: People working on qualitative evidence syntheses
Level of knowledge required: Intermediate

Type of workshop: Training

Introduction to meta-analysis : meta-analysis of binary and continuous outcomes

Facilitators: McKenzie J[1]
[1] *Monash University, Australia*

Objectives: The Cochrane Statistical Methods Group has developed a series of workshops addressing statistical guidelines as formulated in the Cochrane Handbook for Systematic Reviews of Interventions. This workshop will provide review authors with the knowledge of issues surrounding meta-analysis of binary and continuous outcomes.
Description: Binary and continuous data are commonly encountered in health care. Pooling intervention effects from binary and continuous data presents unique methodological issues; some of these issues will be discussed in this workshop. A brief introduction to meta-analysis of binary and continuous outcomes will be included, consisting of data extraction (extraction of event frequencies and/or effect estimates, and the extraction of standard deviations from standard errors, confidence intervals, test statistics and P values); and dealing with outcomes measured on different scales. More complex issues will be discussed, including options for pooling estimates of intervention effect when a mix of results from analyses using change from baseline and final values have been reported; and use of the generic inverse variance method. Issues will be illustrated by examples.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors
Level of knowledge required: Intermediate
Type of workshop: Training

Key concepts for teaching critical appraisal and critical thinking

Facilitators: Oxman A[1], Oliver S[2], Ryan-Vig S[3]
[1] *Norwegian Institute of Public Health, Norway;* [2] *UCL EPPI-Centre, United Kingdom;* [3] *Cochrane UK & Students 4 Best Evidence, United Kingdom*

Objectives: Claims about the effects of interventions are in the mass media, advertisements and personal communication daily. The ability to assess these claims and make informed choices depends on understanding and applying key concepts that are essential for making judgements about whether a claim is justified, whether comparisons are fair and reliable, and whether to take an action. The Informed Health Choices project has developed educational resources for schoolchildren and their parents with the objective of improving their ability to assess claims about treatment effects. As our starting point, we developed a list of key concepts that people need to understand to assess these claims. The list currently includes 34 concepts and serves as a syllabus or curriculum. The objectives of this workshop will be to discuss: Are these concepts sensible and useful? To what extent are they applicable to other types of educational interventions, including ones for learning to assess claims about educational, crime and justice, or social welfare interventions? How do these key concepts fit with other domains of critical appraisal and critical thinking; and how can we promote learning of these concepts?
Description: The workshop will be a structured discussion of the questions in the objectives. The list of key concepts is reviewed annually to allow for revisions of existing concepts or identification and inclusion of additional concepts. This discussion will feed into this.

Category: Evidence literacy, social media, science journalism
Target audience: People interested in teaching critical appraisal or critical thinking skills
Level of knowledge required: Intermediate

Type of workshop: Discussion

Classmate: A trainer's toolkit to support and enhance evidence production training activities with interactive micro-tasks

Facilitators: Noel-Storr A[1]
[1] *University of Oxford, United Kingdom*
Other Contributors:

Dooley G[1], Wisniewski S[2], Steele E[2]

[1] Metaxis, United Kingdon
[2] Oxford University, United Kingdom

Objectives: People often learn best by doing. Trainers will be able to use Classmate to create exciting activities for learning about evidence production and synthesis. The tool will allow trainers and educators to create rewarding 'learning by doing' classroom activities by customising tasks from the Cochrane Crowd platform: http://crowd.cochrane.org. Learners will improve their research and information skills by carrying out practical tasks in identifying and classifying clinical trials and studies. Tasks can be tailored to their areas of interest or expertise.
Description: The workshop will begin with a series of short presentations describing the aims and objectives of Classmate, including reporting on the results of early pilot evaluations of the tool. The workshop will then provide participants with the opportunity to create a learning event using the Classmate toolkit, involving: • Selecting an appropriate micro-task such as RCT identification; • Deciding on size of the group and setting of the students; • Deciding what the reward/s should be. We will also run a pre-designed event within the workshop to demonstrate how Classmate can be used. The workshop is open to all with an interest in be able to use Cochrane Crowd's tasks within learning or training environments.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Particularly aimed at trainers, educators, teachers of evidence based healthcare
Level of knowledge required: Basic
Type of workshop: Training

Too many reviews to update, not enough time or resources! A workshop on prioritising and tools to update reviews

Facilitators: Chang S[1], Garner P[2], MacLehose H[3]
[1] *AHRQ, USA;* [2] *Liverpool School of Tropical Medicine, United Kingdom;* [3] *Cochrane, United Kingdom*

Objectives: -Describe a framework for prioritising which reviews to update. -Apply criteria to examples in determining which reviews to update. -Identify tools that can be used to improve the efficiency of updating reviews.
Description: Overview (20 min): The workshop will start with an overview of the decision framework for assessing systematic reviews for updating, published in the BMJ (BMJ 2016;354:i3507). Representatives from Cochrane and the Agency for Healthcare Research and Quality (AHRQ) will reflect on the framework from their perspectives. Application (30 min): Participants will then engage with facilitators and developers of the framework to apply the criteria and decision framework to different examples from Cochrane, AHRQ, and NICE. Demonstration and Discussion (25 min): G-I-N Tech will provide a demonstration of tools that are available to help improve the efficiency of updating reviews. Participants will have an opportunity to engage and ask questions. Wrap-up and next steps (15 min): Two discussants will comment on the processes, and identify shared learning points on using

the framework and tools. The Workshop Convenors will subsequently summarise the proceedings for participants, and share links to any relevant materials. The workshop will therefore help collate a tool box of approaches that help different groups design strategies to improve the efficiency of their updating processes.

Category: Priority setting for syntheses to meet global priorities
Target audience: Guideline groups, Cochrane editors, or funders of systematic reviews who have a portfolio of systematic reviews and are faced with the challenge of deciding which review to update and when.
Level of knowledge required: Intermediate
Type of workshop: Discussion

Meta-analysis of patient-reported outcomes and application of minimal important differences to facilitate interpretation in systematic reviews and guideline development

Facilitators: Devji T[1], Carrasco-Labra A[1]
[1] *McMaster University, Canada*
Other Contributors:

Guyatt G[1], Patrick D[2], Johnston B[3], Nesrallah G[4]

[1] McMaster, Canada
[2] University of Washington, United States of America
[3] The Hospital for Sick Children, Canada
[4] Humber River Regional Hospital, Canada

Objectives: 1) Present and apply principles influencing choice of patient-reported outcome measures (PROMs) in systematic reviews. 2) Review the use of minimally important differences (MIDs) in enhancing interpretability of PROMs in systematic reviews. 3) Introduce an instrument for evaluating the credibility of MIDs and apply it to a sample of studies. 4) Help participants apply presentation approaches relying on the MID to make PROMs more interpretable in systematic reviews.
Description: This workshop will build on a workshop presented earlier at the Summit describing approaches to make PROMs more interpretable in systematic reviews, including those relying on MIDs. This workshop will review the principles governing choice of an outcome measure in systematic reviews. Participants will apply the approach to a data set. Then we will review the concept of the MID and its application to enhance interpretability of reviews. We will then introduce an instrument for evaluating the credibility of MIDs in PROMs and participants will apply the instrument to a data set. Finally, participants will apply the methods for using the MID to enhance interpretability to a data set to generate results in MID units, relative effects, and risk differences.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors, guideline developers
Level of knowledge required: Intermediate
Type of workshop: Training

Covidence Forum - a discussion of Cochrane's recommended online tool for review production

Facilitators: Arno A[1], Elliott J[2]
[1] *Covidence, Ireland;* [2] *Cochrane , Australia*

Objective: To highlight lesser known and useful features of Covidence for intermediate users.
Description: Covidence is Cochrane’s new online systematic review production platform, improving the efficiency

and experience of producing systematic reviews. Covidence supports import and de-duplication of citations, title and abstract and full text screening, risk-of-bias assessment and data extraction, and export of data directly into the relevant review in RevMan. The workshop will be an opportunity for intermediate users of the tool to get a more in-depth demonstration of creative ways to use Covidence. We will also share some of the long-term goals of Covidence, and conclude by asking users for their input on features they would like to see built in the future. Participants should bring a laptop or arrange to share in order to have hands-on experience of using Covidence.

Category: Improving conduct and reporting of primary research (including teaching and learning)
Target audience: Review authors, Cochrane Review Group editors
Level of knowledge required: Intermediate
Type of workshop: Training

Using ROBINS-I to assess risk of bias in non-randomised studies of interventions

Facilitators: McAleenan A[1], Elbers R[1], Shrier I[2], Sterne J[3]
[1] University of Bristol, United Kingdom; [2] Centre for Clinical Epidemiology, Lady Davis Institute, McGill University, Canada; [3] University of Bristol, UK, United Kingdom
Other Contributors:

Higgins J[1], The development group for the Cochrane risk of bias tool for non-randomised studies .[1]

[1] School of Social and Community Medicine, University of Bristol, UK

Objectives: Describe ROBINS-I, a tool to assess risk of bias in non-randomised studies of interventions (NRSI), train participants through completion of an example assessment, and describe recent extensions to different types of study design.
Description: NRSI can provide information about effects of interventions that is not available from randomised trials, but their results may be affected by confounding, selection and misclassification biases. The ROBINS-I tool assesses the risk of bias in NRSI based on the comparison to a hypothetical pragmatic randomised trial that is free of bias. It assesses the risk of bias within seven domains, within which risk of bias judgements are informed by responses to 'signalling questions'. This workshop will give a brief overview of the ROBINS-I tool. It will incorporate guided practical sessions in which participants will complete parts of a risk-of-bias assessment for one example study, and there will be opportunities for discussion of the tool and its role in systematic reviews. We will describe recent extensions of ROBINS-I to different types of design and analysis.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors
Level of knowledge required: Intermediate
Type of workshop: Training

How to consider health equity in systematic reviews and GRADE guideline development

Facilitators: Welch V[1], Mbuagbaw L[2], Kristjansson E[3]
[1] Cochrane Global Ageing and Equity Methods Group, Canada; [2] Centre for Development of Best Practices in Health, Cameroon; [3] University of Ottawa, Canada

Objectives: - Participants will be introduced to tools (PRISMA-equity, GRADE equity) that can assist them to incorporate equity into their systematic reviews and guidelines. - Participants will understand how to report equity considerations completely and transparently.

Description: Health equity is defined as the absence of avoidable differences in health outcomes and is often not addressed in systematic reviews. The Campbell and Cochrane Equity methods group has developed guidance for conducting equity-focused systematic reviews and incorporating equity into guideline development. An equity focused review is one that assesses the effects of interventions targeted at disadvantaged or at-risk populations or alternately one that assesses the effects of interventions aimed at reducing social gradients across populations. We will introduce participants to guidance for reporting equity-focused reviews and newly developed GRADE guidance on considering health equity in guideline development. We will briefly introduce questions to consider when planning a knowledge translation strategy for an equity-focused review. Participants will be divided into small groups and will apply these methods to a current topic for guideline development, including how to plan the steps of the systematic review. This workshop will allow participants to develop their skills in equity methods so that they may consider adding equity into their next systematic review.

Category: Global health, equity, social and economic policy and practice
Target audience: Systematic review authors and guideline developers
Level of knowledge required: Intermediate
Type of workshop: Training

Use R! An introduction to meta-analysis with R

Facilitators: Schwarzer G[1], Sommer H[2]
[1] Institute for Medical Biometry and Statistics, Faculty of Medicine and Medical Center, University of Freiburg, Germany; [2] Cochrane Germany, Medical Center – University of Freiburg, Faculty of Medicine, University of Freiburg, Germany, Germany
Other Contributors:

Rücker G[1]

[1] Institute for Medical Biometry and Statistics, Faculty of Medicine and Medical Center – University of Freiburg, Germany, Germany

Objectives: Meta-analysis (MA) is a systematic method for combining current knowledge on a scientific topic and thus, it is central to the increasing drive for evidence-based decision making in evaluating therapies and developing health policies. Review Manager (RevMan) is the main software to prepare and maintain Cochrane reviews but its statistical methods for conducting MAs are limited. Accordingly, more advanced techniques beyond the possibilities of RevMan have to be conducted by reviewers using external software. The rapid development of the open-source software R makes it an ideal environment for keeping up with the latest methodological developments in MA. At the end of this workshop, participants should be able to perform basic techniques in R.
Description: This course will provide a brief R introduction (R as a calculator; getting help; importing data from RevMan; R packages for MA); present basic analyses (MA with binary/continuous outcomes; forest plot; fixed-effect and random-effects model). The first part will be designed interactively, for the second, a short presentation will be followed by hands-on application using publicly available R packages. This workshop will be based on the book 'Meta-Analysis with R' (Schwarzer et al., 2015). Participants should have their own laptop with a current installation of R (https://cran.r-project.org/), RStudio (https://www.rstudio.com/products/rstudio/download/), and already installed R packages meta and metafor.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: This workshop is intended for anyone with an interest in performing meta-analysis with R (http://www.r-project.org/). Participants are expected to be familiar with standard methods of meta-analysis provided in Review Manager.
Level of knowledge required: Intermediate

Type of workshop: Training

Concurrent Session F

Adverse effects in systematic reviews: Challenges for formulating the question and searching for different studies and sources of information

Facilitators: Golder S[1]
[1] *Cochrane Adverse Effects Methods Group, United Kingdom*

Objectives: To give guidance for review authors on formulating the question, the available data sources on adverse effects, and how to retrieve data for incorporation into a systematic review. This will include the development of optimal search techniques and discussion of the diverse formats of adverse effects data sources.
Description: Participants will receive a number of scenarios, and will then work together in small groups to plan a search strategy for a comprehensive evaluation of adverse effects. The scenarios will be drawn from real-life situations to cover a wide range of potential adverse effects. At the end, groups will feedback on their search protocols, and any points raised will be discussed further. Examples from existing reviews will be provided by the facilitator, as well as tips and tricks to solve specific issues and give examples of sources of support and help available. The workshop will mostly focus on drug effects but the issues faced in identifying adverse effects for all types of interventions will be touched upon.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Information specialists, reviewers with an interest in adverse effects and searching
Level of knowledge required: Intermediate
Type of workshop: Training

Logic models – developing a logic model and using it to guide your review

Facilitators: Rehfuess E[1], Rohwer A[2], Thomas J[3], Thomson H[4], Gerhardus A[5]
[1] *LMU Munich, Germany;* [2] *Centre for Evidence-based Health Care, Faculty of Medicine and Health Sciences, Stellenbosch University, South Africa;* [3] *EPPI-Centre, UCL, London, United Kingdom;* [4] *Cochrane Public Health, United Kingdom;* [5] *Department of Health Services Research, Institut of Public Health and Nursing Research, University of Bremen, Germany*
Other Contributors:

Rohwer A[1], Gerhardus A[2], Thomson H[3], Thomas J[4]

[1] Centre for Evidence-based Health Care, Stellenbosch University and Cochrane Public Health, South Africa
[2] University of Bremen and Cochrane Public Health Europe, Germany
[3] University of Glasgow and Cochrane Public Health, United Kingdom
[4] University College London and EPPI Centre, United Kingdom

Objectives: Participants will learn about the principles of logic modelling in evidence syntheses across disciplines, and gain hands-on experience with developing a logic model for their own review.
Description: Logic models are increasingly being used in evidence syntheses, in particular in reviews or HTAs of complex interventions in health, education and social welfare. Logic models can help conceptualise interventions within systems by depicting intervention components and the relationships between them, making theories of change explicit, and displaying interactions between the intervention and the context within which it is implemented. A logic model can also be a helpful mechanism for making transparent assumptions among researchers, providing a basis for exploration of heterogeneity and making results more accessible to a range of

decision makers. In essence, logic models provide a framework to support the entire systematic review process from scoping the review, defining and conducting the review and making the review relevant to policy and practice. The workshop will give an overview of three main approaches to logic modelling – a priori, staged and iterative – and present worked examples from Cochrane, Campbell, the EPPI Centre and HTA. Using templates for system-based and process-orientated logic models, working alone or in small groups and supported by several facilitators, participants will then develop and present a draft logic model for their own review.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors
Level of knowledge required: Intermediate
Type of workshop: Training

How to conduct reviews of risks of health effects resulting from exposure

Facilitators: Verbeek J[1], Hoving J[2]
[1] Finnish Institute of Occupational Health, Finland; [2] Coronel Institute for Occupational Health, Academic Medical Center, Netherlands

Objectives: to learn to conduct a systematic review of health effects of environmental or occupational exposure
Description: Methods for conducting intervention reviews are well-established and laid down in the Cochrane Handbook. Reviews of exposure differ from intervention reviews in two fundamental ways. With long-term irreversible outcomes, exposure reviews will be based on observational studies usually cohort and case-control studies instead of RCTs. Where an intervention is an on or off phenomenon, exposure consists of multiple levels. The objective of the exposure review is to establish a dose-response relation. In the workshop, participants will learn how to: - formulate a proper PECCOS question as the analogue of PICO; - how to extract and transform data from studies needed for a dose-response analysis for an air-quality study or a shift work study; - how to assess risk of bias in a cohort study and a case-control study. After the workshop, participants with previous knowledge of intervention reviews will be able to assess the quality of exposure reviews.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Intervention review authors that would like to conduct risk factor reviews
Level of knowledge required: Advanced
Type of workshop: Training

Meta-analysis of diagnostic test accuracy studies for healthcare policy and decision making

Facilitators: Jones H[1], OWEN R[2]
[1] University of Bristol, United Kingdom; [2] NIHR CRSU/ UNIVERSITY OF LEICESTER, United Kingdom
Other Contributors:

Ades AE[1], Sutton AJ[2], Cooper NJ[2]

[1] School of Social and Community Medicine, University of Bristol, UK
[2] Department of Health Sciences, University of Leicester, UK

Objectives: We will discuss whether and how a meta-analysis of diagnostic test accuracy can inform key decisions about testing strategies. This workshop will focus on conceptual issues rather than statistical methods, but we will signpost to the relevant methods literature where appropriate.

Description: Meta-analysis is frequently used to aid healthcare policy decision making for medical technologies. Key decisions to be made include: Should we test? Which test should we use? At which threshold should we call a continuous test result 'positive'? How should the testing strategy depend on patient characteristics? Standard methods for meta-analysis of diagnostic test accuracy produce a 'summary' estimate of sensitivity and specificity and/or a summary Receiver Operating Characteristic (ROC) curve. In this workshop we will explore (i) the extent to which these results can inform decision making; and, (ii) what information a meta-analysis model would ideally provide, to answer the questions of interest more effectively. We will discuss applied case studies including use of natriuretic peptides in the diagnosis of acute heart failure and tests for dementia and multidomain cognitive impairment following a stroke. This will be an interactive workshop, involving group discussions. If you have a smart phone, tablet computer or laptop then we ask that you bring it, as we may use these for multiple choice voting. This is not essential, however.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Anyone with an interest in how a meta-analysis of test accuracy might be used in decision-making, e.g. clinical guideline developers, clinicians, systematic reviewers
Level of knowledge required: Intermediate
Type of workshop: Training

Improving systematic review evidence use through better stakeholder engagement

Facilitators: De Buck E[1], Hannes K[2], Oya C[3], Leach B[4]
[1] Centre for Evidence-Based Practice Belgian Red Cross, Belgium; [2] Cochrane Qualitative and Implementation Methods Group, Belgium; [3] SOAS, University of London, United Kingdom; [4] International Initiative for Impact Evaluation, 3ie, India
Other Contributors:

Young T[1]

[1] Centre for Evidence-Based Healthcare, South Africa

Objectives: To share early learning on success factors and challenges in improving the relevance of systematic reviews (SRs) and use of its' findings by improving stakeholder engagement (SE) throughout the SR process.
Description: The workshop has 4 different sections: (1) "Evidence into use: mission (im)possible?" (10 min): warm-up with the group by listing elements on (a) what makes a SR likely to be used and (b) what would enhance or discourage evidence uptake; (2) "The importance of having an engaged advisory group and stakeholder engagement and communication plan" (35 min): interactive exercise in identifying and mapping stakeholders, followed by a group discussion on how stakeholders can be involved during the SR process; (3) "Stakeholders and the Theory of Change (ToC)" (35 min): small groups session on the added value of SE in ToC development, with workshop participants representing stakeholders with different perspectives (researchers, programme implementers, practitioners, policymakers, donors); (4) "Take home messages" (10 min): wrap-up by the group listing key messages from this workshop. Across the 4 sections we will add examples and elements from two recent cases of extensive stakeholder engagement (SE) during the development of a Campbell SR (1) on WASH (Water, Sanitation, Hygiene) promotional approaches and behaviour change, and on (2) on the effects of certification systems for agricultural commodity production.

Category: Building capacity for dissemination and implementation
Target audience: systematic reviewers, who would like to improve uptake and use of their findings by decision makers; programme managers, decision makers and implementers who want more relevant and useful evidence; donors who want reviews that are used
Level of knowledge required: Basic

Type of workshop: Training

Students 4 Best Evidence: A network for students interested in evidence-based healthcare – an interactive priority-setting workshop

Facilitators: Ryan-Vig S[1], Ware L[2], Docherty T[3], Burton M[4], Ndokera R[3]
[1] Cochrane UK & Students 4 Best Evidence, United Kingdom; [2] Cochrane UK , United Kingdom; [3] Cochrane UK, United Kingdom; [4] Cochrane UK & Cochrane ENT, United Kingdom

Objectives: Students 4 Best Evidence (S4BE) is a global online community with content created by, and for, students interested in evidence-based healthcare (EBH). It aims to help students, from school-age to post-graduate level, learn more about EBH. It does this by providing: 1) a platform for students to blog about topics and issues within EBH; 2) a 'library' of resources and learning tools. Since its launch in 2013, S4BE has grown year-on-year; with an increase in the number of students blogging for the site, social media followers, and partner organisations. It is important that S4BE is truly created by, and for, students, and therefore it is key that students' views shape the future of the site. Accordingly, the objective of this workshop is to engage participants in discussion about how the site can be improved and developed. For example: what type of content would students like to see more (or less) of on S4BE? How can we adapt the structure of the site to be most useful to students studying various subjects?
Description: This workshop will be an interactive feedback session. Participants who are new to S4BE will be encouraged to familiarise themselves with the site prior to the workshop. Using social media, the workshop will also feature live participation of students from around the world who are not able to attend the Summit. Participants' input will feed into the development of S4B4 and help set priorities for S4BE's future.

Category: Evidence literacy, social media, science journalism
Target audience: Students and individuals who work with students
Level of knowledge required: Basic
Type of workshop: Discussion

What to edit and when in Cochrane reviews. Where to start and when to stop!

Facilitators: Dooley L[1], Stovold L[2], Littlewood A[3]
[1] Cochrane Acute Respiratory Infections Group, Australia; [2] Cochrane Airways, United Kingdom; [3] Cochrane Oral Health, United Kingdom
Other Contributors:

Royle E[1], Dearness K[2], Dooley C[3]

[1] Cochrane Collaboration, UK
[2] McMaster University, Canada
[3] Monash University, Australia

Objectives: Participants will gain a better understanding of how to apply editorial checks, relevant to their role, in the production of protocols and reviews.
Description: Through a series of presentations, discussions and hands-on exercises, participants will be walked through the process of editing and be guided by resources and checklists suitable to their needs. This will include resources such as review conduct and reporting standards (MECIR), the Cochrane Style Manual, checklists, bibliographic resources, templates and tools. There will be discussions about reducing duplication of effort by assigning responsibility for editing specific sections of a protocol or review to a particular editorial role (person). Participants will come away with an understanding of what their responsibilities are in terms of editing, and

knowing when it is acceptable to stop their task and seek clarification. We will share examples of where submitted drafts do not meet the required standards for editorial approval. This workshop will appeal most directly to anyone involved in editing, including information specialists, managing editors, editors, and authors of reviews.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Authors, Editors, Managing Editors, Information Specialists
Level of knowledge required: Intermediate
Type of workshop: Training

RobotAnalyst: An online system to support citation screening in evidence reviewing

Facilitators: Nolan K[1], Ananiadou S[2], Przybyła P[3], Brockmeier AJ[4]
[1] NICE, United Kingdom; [2] School of Computer Science, University of Manchester, United Kingdom; [3] National Centre for Text Mining, University of Manchester, United Kingdom; [4] University of Manchester, United Kingdom
Other Contributors:

Mcleod C[1]

[1] NICE, UK

Objectives: •Provide an overview of text-mining methods; •Provide an interactive demonstration and training of the freely available RobotAnalyst software; •Enable participants to be confident in using RobotAnalyst for screening search results for systematic reviews.
Description: The National Centre for Text Mining (NaCTeM) in collaboration with National Institute for Health and Care Excellence (NICE) have developed RobotAnalyst, an online programme for text mining and sifting databases to support the development of systematic reviews. The system incorporates machine-learning functionality (text mining) with visual representation of literature search results to enable efficient sifting of evidence for systematic reviewing. Initial evaluation of the system has shown promising results and efficiencies in time spent sifting 100% of a database. This workshop will allow delegates the opportunity to learn how to use the tool and explore its functionality. The first part will provide an overview of the RobotAnalyst system. Participants will be walked through its key functionality including semi-automatic citation searching, faceted and topic-based searches. The second part will allow participants to have hands on experience of using RobotAnalyst. Participants will work through a series of tasks to equip them with the skills needed to use the system. Participants will need to bring a laptop to access the system.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Guideline Developers, systematic reviewers, reserachers
Level of knowledge required: Basic
Type of workshop: Training

Evaluating the clinical credibility and implementability of clinical practice guideline recommendations using the AGREE-REX tool

Facilitators: Brouwers M[1], Florez ID[2], Spithoff K[1]
[1] McMaster University, Canada; [2] McMaster University & University of Antioquia, Canada
Other Contributors:

Kerkvliet K[1]

[1] McMaster University, Canada

Objectives: To learn how to apply the AGREE-REX tool to assess the clinical credibility and implementability of clinical practice guideline recommendations. To learn how the principles outlined by the AGREE-REX can be used to optimise the development and reporting of clinically credible and implementable guideline recommendations.
Description: The AGREE II is a widely used tool to assess the overall methodological quality of clinical practice guidelines; however, guidelines with high overall methodological quality are not guaranteed to have trustworthy or applicable recommendations. The AGREE-REX has been recently developed as a complement to the AGREE II for assessing the clinical credibility and implementability of guideline recommendations. Workshop participants will learn about when it is appropriate to use the AGREE-REX versus the AGREE II or other evaluation tools and will receive hands-on training by applying the AGREE-REX to a clinical practice guideline. Participants will have a chance to provide feedback about the tool and its application. A discussion will be held about how the AGREE-REX can be used by guideline developers to improve the trustworthiness and implementability of their own guideline recommendations and by guideline users to identify appropriate guidelines/recommendations for implementation or adaptation in their own context.

Category: Enhancing the implementability of evidence tools
Target audience: Clinical practice guideline developers and guideline users/implementers
Level of knowledge required: Intermediate
Type of workshop: Training

Barriers to successful patient and public involvement on guideline panels and strategies to overcome them

Facilitators: Schaefer C[1], Morley R[2], Santesso N[3]
[1] German Agency for Quality in Medicine, Germany; [2] Cochrane, United Kingdom; [3] Cochrane Canada, GRADEing Methods Group, McMaster University, Canada
Other Contributors:

Cowl J[1], van der Weijden T[2], Graham K[3], Datar R[4]

[1] National Institute for Health and Clinical Excellence, UK
[2] Mastricht University, Netherlands
[3] NHS HEALTHCARE IMPROVEMENT SCOTLAND, Scotland, UK
[4] Consumers united for Evidence-based Health Care (CUE), US

Objectives: • To share international experience, problems and pitfalls and best practice examples of patient and public involvement (ppi) in guidelines; • To identify barriers to successful ppi and to prioritise the barriers that are known to have much impact and to be influential; • To analyse if there are specific strategies that may help to overcome the most relevant barriers; • To share current methodological resources (e.g. G-I-N PUBLIC Toolkit, CUE's video series) for ppi in guidelines with all stakeholders and discuss ways to build on them.
Description: In a short introduction, participants will be asked to share their background and experience of patient and public involvement in guidelines. Voices of patients/consumers on their experience of involvement will be presented. A brief presentation will present the results of a 2016 workshop held by G-I-N PUBLIC and CUE that tried to identify barriers to successful ppi and share the strategies that G-I-N PUBLIC and CUE have identified to overcome these barriers. In small group breakouts, participants will add to the presented barriers based on their own experience. Results will be summarised collectively. In an open discussion, participants will prioritise the most relevant barriers, identify strategies to overcome these and discuss if these are sufficiently addressed in current methodologies of ppi like the G-I-N PUBLIC toolkit and identify areas for improvement.

Category: Guideline development, adaptation, assessment and updating
Target audience: Guideline Developers and Methodologists, patients and consumers
Level of knowledge required: Intermediate

Type of workshop: Discussion

Concurrent Session G

EPPI-Reviewer: Review-production software that adapts to your own needs

Facilitators: Graziosi S[1], Thomas J[2], Ghouze Z[3]
[1] EPPI-Centre UCL, United Kingdom; [2] EPPI-Centre, UCL, London, United Kingdom; [3] University College London (UCL), United Kingdom

Objectives: Introduce the core concepts behind the EPPI-Reviewer architecture. Provide a general overview of how to use it according to different needs (meta-analyses, mixed-methods, narrative, meta-ethnographies, etc.).
Description: The workshop will focus on the key elements of EPPI-Reviewer, concentrating on the features that are designed explicitly to support flexibility. Participants will be guided through the overall structure of the software, including highlights on the latest developments (machine learning, priority screening, etc) and hints at future plans. Practical exercises will aim at trying out a few of the showcased features giving each participant the chance to try out the methodologies and approaches that best suit their use-case. This session is suitable for reviewers who are just starting to use EPPI-Reviewer, or are already using the program and are ready to learn more. The ideal participant would have some experience in conducting systematic reviews (although beginners are welcome); attendees will be encouraged to propose a particular methodological problem that they expect to face in their future work. Examples include: - Iterative methods. - Managing overwhelming numbers of search results. - Mixed-methods reviews. - Managing evidence heterogeneity. Participants should bring their own laptop to the session, working in small groups will be encouraged.

Category: Synthesis creation, publication and updating in the digital age
Target audience: Evidence synthesis professionals, review authors, information specialists, guidelines developers.
Level of knowledge required: Intermediate
Type of workshop: Training

Use R! Network meta-analysis with R

Facilitators: Schwarzer G[1], Sommer H[2]
[1] Institute for Medical Biometry and Statistics, Faculty of Medicine and Medical Center, University of Freiburg, Germany; [2] Cochrane Germany, Medical Center – University of Freiburg, Faculty of Medicine, University of Freiburg, Germany, Germany
Other Contributors:

Rücker G[1]

[1] Institute for Medical Biometry and Statistics, Faculty of Medicine and Medical Center – University of Freiburg, Germany, Germany

Objectives: Network meta-analysis (NMA), also known as mixed or indirect treatment comparisons, is a statistical method used to compare multiple treatments and their alternatives simultaneously, combining direct and indirect evidence in a single analysis. The rapid development of the open-source software R and its active community of developers makes it an ideal environment for keeping up with the latest methodological developments in NMA, far beyond the possibilities of Review Manager. At the end of the workshop, participants should be able to conceive the basic concept of NMA and to conduct a NMA using R.
Description: This workshop combines theory and exercises using R. A presentation introducing and illustrating concepts of NMA will be followed by a hands-on application where participants will work through a real-world

NMA example using publicly available R packages. This workshop will be based on the book 'Meta-Analysis with R' (Schwarzer et al., 2015). Participants should have their own laptop with a current installation of R (https://cran.r-project.org/), RStudio (https://www.rstudio.com/products/rstudio/download/), and already installed R packages meta and netmeta.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: This workshop is intended for anyone with basic experience in performing meta-analyses in R, for example, participants of our workshop “Use R! An Introduction to Meta-Analysis with R“.
Level of knowledge required: Advanced
Type of workshop: Training

Introduction to ROBIS, a tool to assess the risk of bias in a systematic review

Facilitators: Whiting P[1], Churchill R[2]
[1] University of Bristol, United Kingdom; [2] University of York, United Kingdom

Objectives: To introduce ROBIS, a recently developed tool to assess the risk of bias in a systematic review (i.e. assessing the risk of bias in the review itself not the primary studies included in the review) and to provide participants with the opportunity to use ROBIS.
Description: The workshop will be split into two sessions: Introduction to ROBIS: The first session will be a brief overview of the development and structure of ROBIS. We will discuss the process used to develop ROBIS (rationale and scope, development of the evidence base, generation of items for consideration, face-to-face meeting and piloting/evaluation). We will then present the final tool and background document and illustrate how to apply it. Applying ROBIS The second session will provide participants with the opportunity to apply ROBIS to an example review. We will split participants into smaller groups and each group will assess the example review according to one or two of the ROBIS domains. We will then regroup to feedback the results of the assessment to the wider group and to discuss any issues that arose during the assessment process.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors, in particular those working on or interested in conducting overviews; open to all Colloquium participants
Level of knowledge required: Basic
Type of workshop: Training

Systematic reviews of prognostic studies IV: Meta-analytical approaches in systematic reviews of prognostic studies

Facilitators: Moons C[1], Hooft L[2], Debray T[3]
[1] PhD, Netherlands; [2] Cochrane Netherlands, Netherlands; [3] Julius Center for Health Sciences and Primary Care, Netherlands

Objectives: This workshop introduces participants to statistical methods for meta-analysis of the accuracy of a specific prediction model and of the added value of a specific predictor to an existing model. We discuss opportunities/challenges of the statistical methods and of common software packages.
Description: Prediction models are commonly developed and validated for predicting the presence (diagnostic) or future occurrence (prognostic) of a particular outcome. Prediction models have become abundant in the literature. Many models have been validated in numerous different studies/publications. Also, numerous studies investigate the added value of a certain predictor/biomarker to a specific existing prediction model. In both situations, aggregating such evidence is important for making inferences on the (added) predictive performance

of a specific model or predictor/marker. Meta-analytical approaches for both situations have recently been developed. In this workshop we illustrate these statistical approaches and how to combine – quantitatively - results from published studies on the predictive accuracy of a specific model or added predictive accuracy of a specific predictor. We illustrate this with various empirical examples.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Reviewers with an interest in meta-analysis of prognostic studies
Level of knowledge required: Advanced
Type of workshop: Training

Supporting trainers in evidence synthesis: Building a stronger community

Facilitators: Cumpston M[1], Huckson S[2], Munn Z[3], Santesso N[4], Schunemann H[5], Sambunjak D[6]
[1] Cochrane Central Executive Team, Australia; [2] Australian and New Zealand Intensive Care Society, Australia; [3] Joanna Briggs Institute, The University of Adelaide, Australia; [4] Cochrane Canada, GRADEing Methods Group, McMaster University, Canada; [5] McMaster University, Canada; [6] Learning & Support Department, Cochrane Central Executive Team, Croatia
Other Contributors:

Watts C[1], White H[2]

[1] Learning & Support Department, Cochrane Central Executive Team, UK
[2] The Campbell Collaboration, Egypt

Objectives: To share perspectives on supporting training communities across organisations involved in evidence synthesis, identify good practice and shared challenges, and identify a programme of collaborative activities to share resources and address those challenges.
Description: Cochrane, the Campbell Collaboration, the Joanna Briggs Institute, G-I-N and the GRADE Working Group share a commitment to capacity-building and training in aspects of evidence-synthesis methods and knowledge translation. Trainers and others involved in co-ordinating training programmes will be brought together in this collaborative workshop. Participants will learn about and discuss the different approaches taken to the recruitment, organisation, curriculum, trainer support and accreditation across training programmes in these five organisations through a series of 5-minute presentations highlighting key issues. Interspersed with these presentations, we will break into small groups (15 minutes each) to discuss: • Ensuring consistency of training content • Delivering train the trainer and other support across disseminated networks • Ensuring quality of delivery & accreditation of trainers • Opportunities for collaboration & resource sharing across organisations These discussions will focus on identifying practical approaches that can be shared across organisations to achieve good practice, and identifying actions that can be taken forward after the workshop to support ongoing collaboration.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Trainers and those who coordinate programs of training in evidence synthesis
Level of knowledge required: Advanced
Type of workshop: Discussion

Assessing the methodological strengths and limitations of qualitative evidence: What are the key criteria?

Facilitators: Munthe-Kaas H[1], Lewin S[2]
[1] Norwegian Institute of Public Health, Norway; [2] Cochrane EPOC, Cochrane Norway, Norwegian Institute of Public

Health, South African Medical Research Council, Norway
Other Contributors:

Glenton C[1]

[1] Norwegian Institute of Public Health, Cochrane Norway, Norway

Objectives: Qualitative evidence syntheses are increasingly used in decision making along with reviews of effectiveness. The GRADE-CERQual approach aims to assess how much confidence to place in evidence from reviews of qualitative research. Assessing the methodological limitations of individual studies contributing to a review finding is one of four components of CERQual. There is no agreement, however, on how best to assess such limitations. To address this issue, the GRADE-CERQual group has identified the most common criteria across existing tools and is currently developing a tool to assess methodological strengths and limitations of qualitative evidence for use in decision making. The objective of this session is to discuss a draft list of key criteria to consider when assessing methodological strengths and limitations of qualitative evidence.
Description: The session will be presented and facilitated by members of the GRADE-CERQual coordinating team. The session is intended for review authors, and methodologists and end users. Attendees should be experienced in qualitative research methods. The session will cover the following: 1) Overview of the systematic mapping and content analysis of existing checklists; 2) Presentation of top-25 common criteria; 3) Small group discussion to rank and discuss empirical evidence for criteria; 4) Feedback.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: People working on qualitative evidence syntheses or primary qualitative research
Level of knowledge required: Advanced
Type of workshop: Discussion

Rapid needs appraisal to inform outbreak response research

Facilitators: Moore C[1], Garritty C[2], Soares-Weiser K[3]
[1] University of Oxford, United Kingdom; [2] Ottawa Hospital Research Institute, Canada; [3] Cochrane Editorial Unit, United Kingdom
Other Contributors:

Sigfrid L[1], Salam A[1], Horby P[1], Clarke M[2]

[1] Epidemic diseases Research Group Oxford (ERGO), Centre for Tropical Medicine and Global Health, University of Oxford, UK
[2] Evidence Aid and Centre for Public Health, Queen's University, Belfast, Northern Ireland

Objectives: To train participants to apply rapid-synthesis methodology for accelerated evidence reviews to identify key research gaps at the early stages of epidemics, through a dynamic, interactive session.
Description: The evidence base for the response to epidemics of (re-)emerging pathogens is limited. Research is rarely an early priority, since agencies are often in crisis mode. The challenges at the outset of an epidemic and the limited window of opportunity to implement research, makes it important that priorities for research are rapidly, but rigorously, defined, while considering ethical aspects, and ensuring the potential for a direct clinical impact. This interactive session will present a formal methodology for rapidly (≤5 days) and transparently identifying knowledge gaps during emergency outbreaks, to inform prioritisation of clinical research. We developed the methodology in collaboration with a range of experts in systematic reviews and outbreak response, and it optimises the use of global networks of clinicians, researchers and systematic reviewers. The session will cover: introduction of the method; an interactive session where participants use an outbreak scenario simulation to apply the methodology; and participant-led discussion on the outcome to include issues/enablers/barriers in

different settings and healthcare systems.

Category: Real world evidence (pragmatic trials, big data)
Target audience: Researchers, physicians, policy makers
Level of knowledge required: Intermediate
Type of workshop: Training

How to author, publish and dynamically update digital and trustworthy evidence summaries, recommendations and decision aids through MAGICapp

Facilitators: Vandvik PO[1], Agoritsas T[2], Lytvyn L[3]
[1] Innlandet Hospital Trust-division Gjøvik, Norway; [2] University Hospitals of Geneva, Switzerland; [3] McMaster University, Canada

Objectives: To be introduced to - and get practical experience with - authoring and dynamic updating of digitally structured trustworthy evidence summaries, recommendations and decision aids with the GRADE system and the MAGICapp (www.magicapp.org) and understand how these are disseminated in online multi-layered formats on all devices, ready for use in practice.
Description: Systematic reviewers, guideline developers and proponents of shared decision making face challenges in the creation, dissemination and updating of trustworthy evidence summaries, guideline recommendations and decision aids. Using an innovative guideline authoring and publication platform (www.magicapp.org) applying the GRADE framework may overcome these challenges. The workshop will first introduce the GRADE framework for evidence summary and guideline development, from a structured clinical question in PICO format to the making of an evidence summary, recommendations and decision aids. Participants then split into groups, simulating panels charged with developing a guideline recommendation for a clinical issue where there is a recently published high-quality systematic review. Participants will with the help of the MAGICapp follow steps from clinical question to creation of the evidence summary (GRADE Summary of Findings table) and recommendation in multilayered presentation formats . In a final plenary session participants will share experiences and propose how to improve MAGICapp.

Category: Guideline development, adaptation, assessment and updating
Target audience: Developers and disseminators of systematic reviews, guidelines and decision aids
Level of knowledge required: Intermediate
Type of workshop: Training

Concurrent Session H

GRADE approach for determining certainty of evidence on how patients value outcomes – Patient Outcome Importance Workshop II

Facilitators: Zhang Y[1], Pardo-Hernandez H[2], Yepes-Nuñez J[3], Guyatt G[1], Schunemann H[1]
[1] McMaster University, Canada; [2] Iberoamerican Cochrane Centre, Spain; [3] Health Research Methodology program at McMaster University, Canada

Objectives: To discuss, from the GRADE perspective, how to assess quality of evidence regarding the relative importance or value that patients place on outcomes relevant to systematic reviews or clinical practice guidelines. Using examples from the literature, to assess risk of bias within and across studies that address the importance or value patients place on relevant outcomes. To discuss applicability of this approach for systematic review authors and guideline panellists.
Description: Attendance of this workshop is contingent on attendance to the 'Integrating patient outcome importance in guideline development: Patient Outcome Importance Workshop I'. To date, no formal GRADE guidance exists regarding how to assess quality of evidence about the relative importance or value patients place

on outcomes of alternative management strategies. In this workshop we will discuss a GRADE approach to rate the certainty of this evidence and to present results and certainty in evidence profiles. This workshop will consist of short presentations where we will introduce the basic concepts and measurements of outcome importance and how this type of evidence can be integrated into clinical guidelines. We will also discuss the proposed GRADE approach using illustrative examples. There will also be small group work where participants will have the opportunity to carry on quality of evidence assessment using a prepared example. Facilitators will answer questions and collect feedback.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Guideline and systematic review developers, methodologists, or anyone interested in discussing this topic.
Level of knowledge required: Intermediate
Type of workshop: Training

Using health-technology assessment in universal health coverage: From learning to practice

Facilitators: Wilkinson T[1], Gad M[2]
[1] PRICELESS, Wits School of Public Health, South Africa; [2] Global Health and Development Group, Imperial College London, United Kingdom

Objectives: Provide a structured forum for decision makers, practitioners and policy researchers to discuss the practical challenges around policy and practice when designing and implementing health-technology assessment (HTA) and priority setting. Facilitate and find ways to continue dialogue between countries to collaboratively share experiences and the 'how to' of using evidence tools for priority setting.
Description: Countries mandated to achieve universal health coverage (UHC) continue to face challenges in providing adequate benefit coverage due to limited resources. Priority setting is an important process to address the disease burden and to reduce morbidity and mortality. HTA is one of the approaches for priority setting and decision making. Members from the Joint Learning Network, the International Decision Support Initiative and beyond are interested in jointly learning about how evidence tools, such as HTA, can be used to inform policy, including setting priorities for the use of limited resources and defining health benefits policies. The workshop will provide interactive panel discussions and an action planning session for participating countries: to identify the gaps and assess countries' preparedness to design and implement HTA; share good practices on the 'how to' and practical use of HTA and priority setting; and explore interest in countries to collaboratively share, learn and co-develop knowledge products to advance their efforts on priority setting.

Category: Health technology assessment
Target audience: Policy makers, health insurance program technical practitioners and policy researchers from countries moving toward UHC
Level of knowledge required: Intermediate
Type of workshop: Discussion
Attachments: GES WS Flyer model 3_ Draft V.3_MG 11092017.png

Introduction to Covidence - Cochrane's recommended online tool for review production

Facilitators: Arno A[1], Elliott J[2], Ciapponi A[3], Glujovsky D[4]
[1] Covidence, Ireland; [2] Cochrane , Australia; [3] Instituto de Efectividad Clínica y Sanitaria, Argentina; [4] Instituto de Efectividad Clínica y Sanitaria (IECS), Argentina
Other Contributors:

Pienkos F[1]

[1] Covidence, Australia

Objective: To familiarise new users with the features of Covidence, Cochrane's recommended online tool for review production.
Description: Covidence is Cochrane's new online systematic review production platform, improving the efficiency and experience of producing systematic reviews. Covidence supports import and de-duplication of citations, title, abstract and full-text screening, risk-of-bias assessment and data extraction, and export of data into RevMan. The workshop will give a hands-on opportunity to get to know Covidence and the support team. We will start with a real-time demonstration of Covidence's features, with opportunities for specific questions after each area of the tool. Following this, we will provide information on support including an indication of materials available for trainers and editors. The second half of the workshop will finish with time for questions, and an opportunity for participants to use Covidence with the presenter available for one-to-one guidance. Participants should bring a laptop or arrange to share in order to have hands-on experience of using Covidence.

Category: Improving conduct and reporting of primary research (including teaching and learning)
Target audience: Review authors, Cochrane Review Group editors
Level of knowledge required: Basic
Type of workshop: Training

PRISMA extension for scoping reviews (PRISMA-ScR) checklist workshop

Facilitators: Tricco A[1], Straus S[1], Akl E[2], Garritty C[3], Godfrey C[4], Horsley T[5], Lewin S[6], Macdonald M[7], Peters M[8], Soares-Weiser K[9]
[1] Li Ka Shing Knowledge Institute, St. Michael's Hospital, Canada; [2] American University of Beirut, Lebanon; [3] Ottawa Hospital Research Institute, Canada; [4] Queen's University, Canada; [5] Royal College of Physicians and Surgeons of Canada, Canada; [6] Cochrane EPOC, Cochrane Norway, Norwegian Institute of Public Health, South African Medical Research Council, Norway; [7] Dalhousie University, Canada; [8] The Joanna Briggs Institute, The University of Adelaide, Australia; [9] Cochrane Editorial Unit, United Kingdom
Other Contributors:

Chang C[1], Clifford T[2], Colquhoun H[2], Griffiths P[3], Hartling L[2], Hempel S[1], Lambrinos A[2], Langlois E[4], Levac D[1], Lillie E[2], Manthorpe J[3], McGowan J[2], Tuncalp O[4], Moher D[2], Moriarty J[3], O'Brien K[2], O'Malley L[3], Pham M[2], Stewart L[3], Weeks L[2], Wilson M[2], Wiysonge C[5], Zarin W[2]

[1], USA
[2], Canada
[3], United Kingdom
[4], Switzerland
[5], South Africa

Objectives: The overall goal is to present the PRISMA extension for scoping reviews (PRISMA-ScR) and to gather insight and suggestion(s) on the tool. The specific learning objectives for participants are to: 1) Become familiar with important reporting items for scoping reviews; 2) Apply the reporting checklist to a health-related scoping review; 3) Reflect on when scoping reviews are most useful as a knowledge-synthesis method.
Description: The workshop will begin with a 30-minute presentation about the PRISMA-ScR, a reporting guideline developed by an international panel of 30 experts. The presentation will be interactive, and include 3 rounds of questions and comments from participants (one at each 10-minute interval). A 45-minute small group exercise will be conducted where participants (working in groups of 5-10 people) will apply the PRISMA-ScR checklist to a scoping review on a health-related topic. Facilitators will circulate each group to provide direction and assistance. A group discussion will follow to engage participants about the quality of the reporting of the selected scoping review according to the PRISMA-ScR checklist. The final 30 minutes will be used to gather insight and suggestions

for improvement on the PRISMA-ScR checklist from the participants. Interested participants will be asked to fill out a survey to provide additional feedback. An evaluation form will also be distributed to collect suggestions to improve future workshops.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Researchers, Policy makers, Consumers
Level of knowledge required: Basic
Type of workshop: Training

Wikipedia and crowd sourcing: Improving health information for the public

Facilitators: De Haan S[1], Millward H[2], Owens N[3]
[1] Cochrane , Netherlands; [2] Cochrane, United Kingdom; [3] Cochrane Communications and External Affairs, Australia

Objectives: To introduce participants to: 1. the Cochrane-Wikipedia initiative and ongoing projects to increase Cochrane's contribution to Wikipedia; 2. how to edit articles in Wikipedia, specifically how to register as a user, creating user pages, general editing, citing and referencing, and following some good practices.
Description: Wikipedia has been accepted worldwide as a credible source of health information by lay people, medical students, and healthcare professionals. With about 155 000 health articles getting about 400 million page views each month, there is an urgent need for ensuring that information available on Wikipedia is accurate, current, reliable and free from bias. For Cochrane helping to ensure the quality and reliability of Wikipedia health articles is a logical extension of our mission to produce, disseminate and advocate for the best available evidence. This workshop is for new or novice editors in Wikipedia who wish to learn more about Wikipedia and to contribute actively to the improvement of health articles. Participants wishing to make specific edits are encouraged to prepare and bring edited text, references, and other resources in advance of the workshop to maximise efficient use of limited time. The workshop will also draw attention to Task Exchange and other crowd sourcing tools that Cochrane is using to increase its contribution to Wikipedia content.

Category: Evidence literacy, social media, science journalism
Target audience: anyone with an interest of communicating research evidence through Wikipedia
Level of knowledge required: Basic
Type of workshop: Training

EQUATOR Network workshop. Reporting guidelines: An effective tool to improve reporting of research studies and other reports

Facilitators: De Beyer J[1]
[1] EQUATOR Network, Centre for Statistics in Medicine, University of Oxford, United Kingdom

Objectives: Introduce reporting guidelines and other EQUATOR online resources. Discuss and practice using these tools to write and publish well-reported health research.
Description: Improving research publication and dissemination processes is directly linked to more transparent, reproducible and usable research. Reporting guidelines are tools that help researchers to report every important detail about their study when writing a paper. Reports compliant with reporting recommendations are easier to assess and use in systematic reviews, clinical guidelines and practice. Our workshop will summarise the latest research on the quality of the published scientific literature and introduce the EQUATOR Network and reporting guidelines for both primary research and research syntheses. We will provide practical examples of using these resources effectively to achieve maximum impact and further use of reported research. At the end of this workshop, participants will: 1) Understand the importance of transparency and accuracy in health research reporting and be familiar with common reporting problems. 2) Understand the key concepts of reporting guidelines and their efficient use. 3) Appreciate the relationship between study conduct and study reporting, and

differences in their assessment. 4) Learn about the main elements of selected reporting guidelines and have practised using them. 5) Be familiar with the EQUATOR Network's online resources (www.equator-network.org).

Category: Improving conduct and reporting of primary research (including teaching and learning)
Target audience: Researchers, policy makers, editors, peer reviewers, consumers, activists, students, lecturers, and anyone interested in improving the quality of research reporting and research itself
Level of knowledge required: Basic
Type of workshop: Training

Checking the checkboxes: How to critically appraise performance measures

Facilitators: Drabkin A[1], Alper B[2], Qaseem A[3]
[1] DynaMedPlus,LLC, USA; [2] EBSCO Health DynaMed , USA; [3] American College of Physicians, USA

Objectives: 1) Participants will learn four criteria for critical appraisal of a performance measure. 2) Participants will learn how to apply the criteria to evaluate a performance measure. 3) Participants will evaluate at least one performance measure using the methodology described.
Description: Performance measures are increasingly commonly used to evaluate the quality of clinical care, but reproducible criteria to assess appropriateness of performance measures have not been established. This workshop will introduce a methodology for critical appraisal of performance measures and provide the opportunity for active evaluation of at least one common performance measure using this methodology. A set of Criteria for Appropriateness will be presented together with instructions for their application. Participants will work in small groups to evaluate performance measures using appropriate background material (including original evidence reports, systematic reviews, and relevant organisational guidelines). Participants will share their findings with the large group to explore challenges, themes and suggestions generated by their analysis. Structure Introduction – 10 minutes Small group Performance Measure evaluation - 45 minutes Group discussion - 30 minutes Conclusion - 5 minutes All participants should bring a laptop (and those unable to do so may share)

Category: Quality improvement methods and performance measures
Target audience: Clinicians, Physician administrators and,researchers with interest in critical appraisal methodology and quality improvement
Level of knowledge required: Intermediate
Type of workshop: Training

Creating evidence tables for use in systematic reviews and guideline development: GRADE approach

Facilitators: Santesso N[1], Brozek J[2], Wiercioch W[2]
[1] Cochrane Canada, GRADEing Methods Group, McMaster University, Canada; [2] McMaster University, Canada
Other Contributors:

Schunemann H[1]

[1] GRADEing Methods Group, McMaster University, Canada

Objective: This workshop will take participants through the process of creating evidence tables, such as Summary of Findings Tables and Evidence Profiles, and creating Evidence-to-Decision Tables to make evidence-based recommendations.
Description: After conducting a synthesis of the literature, whether of randomised or non-randomised studies, it is important to communicate the findings clearly for decision making. Summary of Findings Tables or Evidence Profiles are tables which summarise the evidence from a synthesis of the literature. Once the tables are created,

they can be presented in a variety of ways to inform decision making by other researchers, patients and the public, clinicians, and guideline developers. The GRADEpro software can be used to create these tables and other products. The first part of this workshop is a hands-on exercise for participants to practice using GRADEpro to make evidence tables, such as Summary of Findings Tables. In the second part of this workshop, participants will be able to practice presenting the evidence in systematic reviews, or in Evidence-to-Decision tables to make recommendations, on interactive websites, or as an App for guidelines. Participants should bring a laptop to practice, consider sharing with another participant, or watching the presentation.

Category: Improving conduct and reporting of syntheses (including teaching and learning)
Target audience: Evidence producers, guideline developers, Cochrane Editors and Authors
Level of knowledge required: Basic
Type of workshop: Training

Systematic reviews of prognostic studies V: Using GRADE to appraise bodies of evidence about overall prognosis and prognostic factors

Facilitators: Iorio A[1], Williams K[2]
[1] Department of Health Research Methods, Evidence, and Impact (HEI), McMaster University, Canada; [2] University of Melbourne, Australia

Objectives: Systematic reviews (SR) of observational studies addressing patients' prognosis may provide robust estimates of the likelihood of adverse outcomes in broad populations or the role of patient's characteristics in modifying their risk. As in any SR, consumers require estimates of the certainty of evidence (synonyms: confidence in or quality of evidence). Using GRADE methodology, we have presented structured approaches to rating certainty of evidence from prognostic studies, which have been adopted in several guideline development programmes. Work is in progress for studies of individual prognostic factors and prognostic models.
Description: In this workshop, we will summarise the approach to broad population prognosis and work through examples. We will begin with a description of how to apply five elements or rating certainty to prognostic studies: risk of bias, precision, consistency, directness and publication bias. We will explore the many aspects involved in incorporating evidence about risk factors in assessing effects in subgroups analysis. Finally, we will discuss how prognostic information can be incorporated in evidence profiles and evidence to decision tables, and ultimately applied to a patient management decision. After successful completion of the workshop, participants will: 1. know the principles of the GRADE approach; 2. be able to prepare EPs and Summary of Findings tables for prognostic questions addressing broad populations.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Authors conducting systematic reviews of overall prognosis, baseline risk, prognostic factors; guideline users incorporating prognostic evidence intro management recommendations
Level of knowledge required: Intermediate
Type of workshop: Training

Concurrent Session I

Applying current philosophical insights on causality using Qualitative Comparative Analysis as an additional synthesis in systematic reviews to address complex interventions

Facilitators: Chandler J[1], Thomas J[2], Sutcliffe K[3], Kahwati L[4], Kneale D[5]
[1] Cochrane Central Executive, United Kingdom; [2] EPPI-Centre, UCL, London, United Kingdom; [3] EPPI-Centre, University College London, United Kingdom; [4] RTI International-University of North Carolina Evidence-based Practice Center, USA; [5] EPPI-Centre, UCL Institute of Education, United Kingdom
Other Contributors:

Noyes J[1], Rycroft Malone J[2]

[1] Professor of Health and Social Services Research and Child Health, Bangor University, North Wales, UK
[2] Pro Vice Chancellor for Research and Impact, Bangor University, North Wales, UK

Objectives: • Introduce current philosophical perspectives on causality to facilitate understanding of complex causal relationships in data. • Introduce concepts of Qualitative Comparative Analysis (QCA), a methodology assuming complex causality. • Demonstrate QCA synthesis in systematic reviews taking account of potential benefits, challenges and limitations.
Description: We outline causal philosophical accounts and a synthesis method from sociology, QCA. QCA allows synthesis of both quantitative and qualitative data. Its use may expand the systematic review toolkit for complex interventions to explore variance across studies. We show how these causal accounts operate within the QCA set theoretic approach: equifinality, asymmetry, and configurations of causal factors (10-min presentation). Participants 'play' with these concepts to increase understanding (5 mins). Using examples from systematic reviews facilitators outline the method familiarising participants with the 'truth table' – a matrix of cases, causal factors, and outcome with set membership scores (15-min presentation). Participants will compare case examples of systematic reviews with and without a QCA synthesis to explore difference in approaches (50 mins, group work and feedback). We end with discussion using participants' own experience of challenging, multi-component, complex interventions in complex contexts and whether QCA has utility in the systematic review environment (10-min discussion).

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Guideline and systematic review developers; users of guidelines and systematic reviews, including practitioners and policy makers. Level of knowledge required is basic. The "Global evidence, local needs: lessons from practical philosophy" session helps.
Level of knowledge required: Basic
Type of workshop: Training
Attachments: Workshop QCA particpant info_Final 2.docx

Assessing the certainty of the evidence from network-meta analysis using the GRADE approach

Facilitators: Brignardello-Petersen R[1], Foroutan F[2], Yepes-Nuñez J[3], Guyatt G[1]
[1] McMaster University, Canada; [2] Department of Health Research Methods, Evidence, and Impact, McMaster University, Canada; [3] Health Research Methodology program at McMaster University, Canada

Objectives: For individuals considering conducting a network meta-analysis, to gain familiarity with and begin to gain facility in applying the GRADE Working Group approach to rating certainty of evidence in paired comparisons within a network meta-analysis.
Description: The GRADE Working Group has developed an approach to rating certainty of evidence (also known as confidence in evidence or quality of evidence) in each paired comparison within a network meta-analysis. The approach involves 3 steps: i) Rate the certainty of the direct estimates; ii) Rate the certainty of the indirect estimates; and, iii) Rate the certainty of the network estimates. The workshop will begin with an interactive lecture providing details of the approach and then review a step-by-step template for applying the approach. Workshop participants will then break into groups of 5 or 6 to work through an example of a network meta-analysis, guided by facilitators when needed. Results and details of the assessments will be discussed in a large group before the end of the session.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors
Level of knowledge required: Intermediate

Type of workshop: Training

Tools to support capacity development for evidence-informed public health

Facilitators: Dobbins M[1]
[1] *National Collaborating Centre for Methods and Tools, Canada*
Other Contributors:

Ciliksa D[1], Snelling S[1]

[1] McMaster University, Canada

Objectives: The National Collaborating Centre for Methods and Tools (NCCMT) supports capacity development amongst the public health workforce in Canada for evidence-informed decision making. The objective of this workshop is to illustrate the seven-step process of evidence-informed decision making advocated by the Centre, as well as highlight tools and resources currently used by the centre to support capacity development at each step in the process.
Description: A high-priority public health topic will form the foundation of a case scenario that will be used to work through the seven-step process of evidence-informed public health. The workshop will combine large and small group discussion. In small groups participants will apply the identified method and/or tool for each step to the case scenario. By linking methods and tools to each step participants will gain knowledge of how to implement evidence-informed practice in their work and/or organisation in a systematic, comprehensive manner. Participants will also experience how the centre uses interactive strategies within workshops (iclicker technology) to develop and evaluate in real time increased capacity for evidence informed decision making. In the final component of the workshop through large group discussion will be explore effective strategies for supporting organisational change.

Category: Building capacity for dissemination and implementation
Target audience: those tasked with developing capacity among health professionals and other decision makers for evidence-informed practice
Level of knowledge required: Basic
Type of workshop: Training

Identification and prioritisation of essential content of an evidence-based healthcare online course for health professionals

Facilitators: Watson M[1], Young T[2]
[1] *University of Bath, United Kingdom;* [2] *Stellenbosch University and Cochrane South Africa, South Africa*

Objectives: To co-design essential and desirable elements to be included in an evidence-based healthcare online course that would be relevant for health professionals in worldwide.
Description: Evidence-based healthcare (EBHC) involves identifying best evidence; making judgements about applicability of evidence to an individual, population or setting; and applying the evidence to make informed and appropriate healthcare choices. There is considerable variation in the extent to which health professionals are trained in the principles and methods of EBHC. The provision of tailored, easy access online training and resources could increase capacity and capability in the healthcare workforce around the world. In this workshop, we will draw on international expertise from participants in the conference to co-design a curriculum for an online evidence-based healthcare course. Implicit in the design will be the creation of a learning resource which is widely accessible, relevant to all health professionals irrespective of country, discipline or setting and promotes the key principles of evidence-based practice.

Category: Improving conduct and reporting of primary research (including teaching and learning)
Target audience: Those involved with planning, implementation of EBHC learning activities
Level of knowledge required: Intermediate
Type of workshop: Discussion

Using GRADE to integrate randomised and non-randomised studies in systematic reviews

Facilitators: Schunemann H[1], Morgan R[1]
[1] *McMaster University, Canada*
Other Contributors:

Cuello C[1], Santesso N[1], Guyatt G[1], Verbeek J[2]

[1] McMaster University, Canada
[2] , Finland

Objectives: To present methods for the integration of randomised (RS) and non-randomised studies (NRS) in health syntheses by using the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach.
Description: RS are considered the best source of evidence for health syntheses and clinical practice guidelines. NRS of interventions evaluating benefits and harms are critical to many areas of evaluation, yet they are commonly disregarded or separated from RS due to confounding and bias. With better methods and tools for the conduction and assessment of risk of bias in NRS (i.e. Risk Of Bias In Non-randomised Studies of interventions [ROBINS-I]) and the increasing use of the GRADE approach to assess the overall certainty in the estimates, more opportunities to integrate NRS with RS are feasible and desirable. The purpose of this workshop is to present and discuss different strategies on how NRS can be used as replacement, sequential, or complementary evidence for using with a body of evidence of RS in systematic reviews with real simplified examples (obtained from case studies) to practice and discuss the implications of using GRADE criteria, using Evidence Profiles, 'Summary of findings' tables, and the ROBINS-I tool. We will also discuss different methods (e.g. sensitivity analyses) to test the robustness and implications for future research. This is a hands-on workshop with great opportunities for interaction and learning.

Category: Methods for conducting syntheses (including different evidence, searching and information retrieval, statistics, assessing methodological quality)
Target audience: Review authors, and researchers with particular interest in systematic reviews and guideline development methods
Level of knowledge required: Intermediate
Type of workshop: Discussion

Visual-storytelling tools for evidence translation and use

Facilitators: Govender J[1]
[1] *Data Innovator; South African M&E Association, South Africa*
Other Contributors:

Morar G[1]

[1] Data Innovator, South Africa

Objectives: To provide participants an introduction to visual-storytelling approaches and tools which can be used to improve evidence translation and use.
Description: Evidence generators often present information in long, academic papers or reports that put even the staunchest supporter to sleep. The ability to tell a compelling story about evidence is key to how consumers of information engage with and assimilate information. Our innate love of stories and their ability to cut through barriers, makes them a highly effective way to communicate the information. Visual techniques can also help to summarise and draw attention to key story elements. Creating visual content incorporates the use of infographics, data visualisation, graphic design with strategic communication or narrative. This ensures that that the consumer of evidence, not only engages with the information but also remembers it. Creative ways of incorporating visual content allows evaluators to create mental stamps of critical points in your 'story'. The workshop will include presentation of approaches to visual story-telling, as well as practical exercises with basic tools. All participants are to bring a laptop (and those unable to do so may share). The following themes will be covered during the workshop: 1) Conceptualising flow 2) Icons to draw attention to core issues 30 Maps to present spatial information 4) Timelines to highlight key initiative events 5) Photographic overlays

Category: Evidence tools for consumers and to promote shared decision making
Target audience: Consumers and researchers
Level of knowledge required: Basic
Type of workshop: Training

From evidence to dataviz

Facilitators: Moratti M[1]
[1] *OPML, United Kingdom*
Other Contributors:

Moratti M[1]

[1] OPML, UK

Objectives: - To broaden participants' visual vocabulary, and expose them to latest options, techniques and contemporary resources to communicate evidence using data visualisation; - To get participants to practice the process of creating a data visualisation outputs by working in small groups on simple pre-defined assignments; Descriptions: There is an increasing demand from clients and stakeholders to improve and innovate strategies and products to communicate evidence and research results, with a particular emphasis on short, accessible and visual material that facilitates understanding and uptake.
Description: After a short presentation which aims to provide some key definitions, present key examples of different types of data visualisation outputs (20 mins including Q&A) a practical workshop will be facilitated to practice the process of creating data visualisation outputs (70 mins). The participants will organise themselves in small groups (3-5 people) and be assigned a specific "data challenge". The group will brainstorm, identify, sketch options for visualising the data and report back to the whole group using a design process framework provided. The trainer will provide feedback and assessment on clarity, accessibility, design decisions made by the group and show the best examples of dataviz solutions available for each data challenge.

Category: Building capacity for dissemination and implementation
Target audience: Evidence producers / researchers / anyone interesting in making products more visual
Level of knowledge required: Basic
Type of workshop: Training

New ways to bring people together to create guidelines and systematic reviews: TaskExchange and Cochrane Crowd

Facilitators: Turner T[1], Noel-Storr A[2], Mavergames C[3]
[1] Cochrane Australia, Australia; [2] University of Oxford, United Kingdom; [3] Cochrane Central Executive Team, Germany

Objectives: The session will introduce the newest versions of TaskExchange and Cochrane Crowd, describe their aims, progress and future plans; and how both platforms can support high-quality guideline and systematic review development.
Description: Two new platforms, TaskExchange and Cochrane Crowd, support efficient production of guidelines and systematic reviews by creating innovative ways to enable people to make meaningful contributions to producing evidence. TaskExchange brings together people from across the evidence ecosystem. Developed by Cochrane, and addressing the needs of guideline developers through the GIN network since 2017, it connects people creating guidelines and reviews who need tasks done, with people who have the skills and time to do them. http://taskexchange.cochrane.org/ Cochrane Crowd is a citizen science platform where people help curate high-quality health evidence. Volunteers from around the world help to identify the research needed to determine if a treatment or diagnostic test works. http://crowd.cochrane.org/ Participants will learn how to use TaskExchange and Cochrane Crowd to support guideline and systematic review development and experience the platforms by: TaskExchange 1) Posting & viewing tasks; 2) Creating & viewing profiles; 3) Setting up task notifications. Cochrane Crowd 1) Trialling tasks; 2) Exploring current & potential incentives and reward structures; 3) Trialling training modules. Please bring a laptop or similar.

Category: Synthesis creation, publication and updating in the digital age
Target audience: People who are looking to get involved with systematic reviews, or who would like to find people who are willing to help with review or guideline development
Level of knowledge required: Basic
Type of workshop: Training

The relevance of core outcome sets to systematic reviewers and guideline developers

Facilitators: Williamson P[1], Tugwell P[2], Taske N[3]
[1] University of Liverpool, United Kingdom; [2] Cochrane Musculoskeletal / Health Equity Methods Group, Canada; [3] NICE, United Kingdom
Other Contributors:

Clarke M[1]

[1] QUB, UK

Objectives: 1) Increase understanding of core outcome sets (COS), how they are developed, and current levels of uptake; 2) Appreciate issues related to stakeholder involvement; 3) Use the COS-STAD tool for critical appraisal; 4) Consider their role in the development and uptake of COS.
Description: A COS is an agreed standardised collection of outcomes to be measured and reported, as a minimum, in all research for a specific clinical area. The credibility of a COS depends on the use of sound methodology in its development, and, transparent reporting of the processes adopted. To influence policy and practice, the outcomes need to be relevant and important to key stakeholders. This session will address issues related to how systematic reviewers, guideline developers, HTA organisations and other policy makers can appraise and make use of COS and the COMET database. The workshop will comprise: 1) a talk introducing COS and the COMET database (10 min); 2) interactive discussion regarding stakeholder involvement (10 min); 3) a talk describing methods of COS development, including COS-STAD (10 min); 4) small group exercise - critical appraisal of selected COS (40 min); 5) facilitated discussion on the role of the participants in COS development and uptake

(20 min).

Category: Other topics
Target audience: Systematic reviewers, guideline developers, HTA organisations and other policy-makers
Level of knowledge required: Intermediate
Type of workshop: Training

Using GRADE in public-health guidelines – challenges and some solutions?

Facilitators: Katikireddi S[1], Shaw B[2], Thomson H[3]
[1] MRC/CSO Social & Public Health Sciences Unit, University of Glasgow, United Kingdom; [2] NICE, United Kingdom; [3] Cochrane Public Health, United Kingdom
Other Contributors:

Nolan K[1], O'Neill P[1], Hilton-Boon M[2]

[1] The National Institute for Health and Care Excellence (NICE), UK
[2] MRC/CSO Social & Public Health Sciences Unit, University of Glasgow, UK

Objectives: •Explore if and how GRADE approaches are applied to Public Health/ social Policy (PHP) guidelines.•Explore experiences and responses to challenges developers of PHP guidelines face in applying GRADE. •Discuss how the GRADE PHP Working Group can support systematic reviewers and guideline developers.
Description: Developing PHP guidelines can be challenging for many reasons including: population-based intervention delivery; a highly heterogenous evidence base often constituted of non-randomised studies; the diverse range of stakeholders across multiple sectors; and the varying importance of outcomes to different stakeholders. The workshop involves 3 parts: 1) Challenges introducing the GRADE approach to PHP in the UK (25 min). Perceived challenges faced by the UK's National Institute of Health and Care Excellence (NICE) will be presented and debated. 2) Detailed exploration of challenges developing PHP guidelines (45 min). Attendees will consider in groups what challenges they are aware of, or anticipate experiencing, when using GRADE in PHP guidelines. Why some challenges occur to a lesser or greater extent than for clinical interventions will be explored, with reasoning elucidated through examples (inc from low/middle income countries). 3) Feedback and next steps (20 min). The range of challenges faced and whether they can be met by existing GRADE approaches will be explored. We will finish by considering how a GRADE PHP group can support applying GRADE.

Category: Guideline development, adaptation, assessment and updating
Target audience: Guideline developers, systematic reviewers (within Cochrane, Campbell, EPPI Centre and Joanna-Briggs), researchers, public health practitioners and users of guidelines.
Level of knowledge required: Intermediate
Type of workshop: Discussion

Special sessions

Concurrent Session A

Addressing the global health workforce shortfall by 2030: The need for intersectoral research evidence

The High-Level Commission on Health Employment and Economic Growth, in its 2016 report "Working for Health and Growth – Investing in the health workforce", makes the case for more and better investment in the health workforce, specifically to address the shortfall of 18 million health workers by 2030, primarily in LMICs. The Commission calls for more data, information and accountability, and emphasizes the need for evidence from countries that will help increase political support and action to address shortage of health workforce. Working for Health: an ILO, OECD, WHO Five-Year Action Plan supporting the implementation of the Commission's recommendations and immediate actions in line with the WHO Global Strategy on Human Resources for Health, was adopted by the World Health Assembly in May 2017. Health policy makers require evidence for making decisions including those on increased investment in the health and social workforce. The capacity for focussed data analyses and for using evidence- based intersectoral approaches to maximize returns on investment needs to be strengthened. This session will discuss the need for research evidence to inform policy making from the perspective of several African countries, with a focus on interventions to address health and social workforce shortfalls and mismatches. The cross-sectorial nature (including health, education, labour and other sectors) of health workforce decision making will be addressed as well.

The objectives of the session are to: (1) present evidence on the socio-economic returns on health workforce investments and the new intersectoral research agenda required to address the global health workforce shortfall; (2) discuss challenges and identify solutions to strengthen related evidence-informed policy making and investments.

Panelists:

An intersectoral panel, including international and national level policy makers and researchers, will be put together for this Special Session.

The panel will address the following topics:

- Key messages from the report: 'Working for Health and Growth – investing in the health workforce'. What is the evidence on the socio-economic returns on health workforce investment, where are the evidence gaps? Dr Khassoum Diallo, Coordinator, Health Workforce Department, WHO/HQ
- Expanding and transforming the health workforce in South Africa: Current situation, policy development, investments and evidence needs. Dr Precious Matsoso, Director General, National Department of Health, South Africa
- Agendas and evidence for addressing health workforce challenges - a historical perspective.

Prof Uta Lehmann, School of Public Health, University of the Western Cape.

- Using evidence to inform health workforce policies: What can we learn from the findings of four Cochrane overviews of systematic reviews of health systems interventions? Dr Simon Lewin, Joint coordinating editor Cochrane EPOC; Senior Researcher, Cochrane Norway, Norwegian Institute of Public Health and South African Medical Research Council

Panellists will provide 10 minutes input each. Following the panel presentations, a participatory brainstorm and discussion will be held aided by an interactive polling programme, gathering questions and research ideas from the audience that will be debated by the panel. Through polling, the audience will decide which questions are priority and will thus be debated first. It is expected that time allows two rounds of discussion with the panel.

Facilitators:

Tamara Kredo

Khassoum Diallo

Sylvia De Haan

Target audience:

Policy makers, decision makers in health, labour and education ministries or departments, researchers across disciplines with specific interest in health workforce issues. No previous knowledge required.

Type of session:

This 90 minute interactive panel will explore the intersectoral research evidence required to better understand the socio-economic returns on health workforce investments and develop effective investment cases to address the global shortfall of health workers. Research ideas, challenges and solutions will be crowd-sourced from the audience through real-time interactive software and discussed with the panel to maximize interaction and engagement.

Increasing value and reducing waste in research: Towards an evidence-based research approach

Objectives:

The aim of this session is to further initiatives towards reducing waste in research, such as the REWARD Alliance and the EBRNetwork. More specifically:

a. Participants will enhance their knowledge and understanding of research waste and evidence-based research.

b. Participants will contribute to the long-term vision of how to reduce research waste and promote evidence-based research.

c. Participants will identify opportunities to become involved in strategies to reduce research waste and promote evidence-based research.

d. Participants will understand the role all stakeholder groups play in reducing research waste and promoting evidence-based research.

Description:

The REWARD Alliance identified that 85% of research is wasted, usually because it asks the wrong questions, is badly designed, not published, and/or poorly reported. In turn, this diminishes the value of research and represents an important financial loss. A first step towards increasing the value of research and reducing waste is to monitor the issues, raise awareness of these, and develop and implement solutions. The EBRNetwork was established to address the issues around initiating new research and putting new results into context.

The network advocates for the following principles:

- No new research studies without prior systematic review of existing evidence.
- Efficient production, updating and accessibility of systematic reviews.

Facilitators:

Elaine Beller

Caroline Blaine

Matt Westmore

Jennifer Yost

Hans Lund

Target audience:

Stakeholders relevant for the evidence-based research approach: Researchers, ethics committee members, members of funding agencies, journal editors and reviewers, educators, patients and consumers, information specialists and librarians.

Type of session:

Different views exist about how to characterise, raise awareness, develop and implement strategies to address these principles across organisations, contexts and cultures. This session will therefore be a forum for the sharing of knowledge and ideas for reducing research waste and promoting evidence-based research. Facilitators will engage participants in an interactive Q&A, as well as small and large group discussions, to inspire a long-term vision for reducing waste through evidence-based research, acknowledge the enablers and challenges, and identify strategies to achieve this long-term goal. The session will conclude with a summary of future directions, by Paul Glasziou (REWARD Alliance) and Hans Lund (EBRNetwork), for how the REWARD Alliance, the EBRNetwork, and interested participants can work together towards reducing research waste.

Other contributors:

Bogh Juhl

From living systematic reviews to living recommendations

Objectives:

Participants will learn about concurrent developments with living systematic reviews (LSRs) and living guidelines, and how the two can be integrated within the context of the new evidence ecosystem.

Description:

The idea that evidence synthesis and related products, such as guidelines, can be 'living', by incorporating the latest available evidence at all times, is increasingly becoming a reality. With technological advances, such as online platforms, structured data and automation allowing for streamlined incorporation of new data, new innovations for LSRs and living guidelines are increasingly being developed and integrated. Concurrently, systematic review and guideline producers are exploring new production models to manage the resource implications of keeping content up to date. A truly integrated living evidence model, where evidence from LSRs feeds directly into living recommendations that are made available to end-users at point of care, has the potential to substantially shorten the time from evidence production to benefit for patients. In an integrated, living evidence model, there is potential for resource allocation by reducing duplication and reducing manual labour for evidence and guideline producers through technology.

The Special Session will include a series of brief presentations, followed by a panel discussion.

Presentations will include:

- Introduction to living systematic reviews (Julian Elliott and Anneliese Synnot)
- Introduction to living guidelines and recommendations (Per Vandvik)

- Case studies of pilot work under way in which LSRs are being integrated with living guidelines (Elie Akl and Jeremy Grimshaw)
- Publishing models for living systematic reviews and living guidelines (Harriet Maclehose and Rebecca Lawrence)
- Panel: Making living guidelines a reality: Technology, processes and people and dissemination (All speakers, plus Chris Mavergames, and Pablo Alonso Coello)

Participants should come armed with curiosity and questions, but no resources or specialist knowledge about living evidence is required. An intermediate understanding of standard systematic review and guideline processes will be assumed.

Facilitators:

Anneliese Synnot

Target audience:

Open to anyone with an interest in living systematic reviews and living recommendations. It is assumed that participants have an intermediate level of knowledge about standard systematic review and guideline processes.

Type of session:

Stakeholder engagement session.

Other contributors:

Turner T1, Mavergames C2, Elliott J3, Vandvik PO4, Coello PA5, Pardo Hernandez H5, MacLehose H6, Hilton J6, Akl E5, Agoritsas T5, Kuijpers T5, Munn Z5, Brandt L5

1 Australia

2 Cochrane, Germany

3 Cochrane, Australia

4 Magic, Norway

5

6 Cochrane, UK

Evidence for social and economic policy

This session is linked to Plenary 1: EVIDENCE FOR AFRICA: How evidence is changing communities across one continent

Both researchers and policy makers will interested in this session. It is likely that most African participants will attend this session, but those from elsewhere interested in learning more about experiences in the use of evidence may also attend.

The session will appeal to participants at all levels of knowledge.

Objectives:

This session will share African experiences of different channels through which different types of evidence are being used for better social and economic policies and practice. Recent years have seen greater institutionalisation of the use of evidence in African countries. This session presents diverse experiences from Ghana, Kenya, South Africa and Uganda. The session highlights different forms of evidence - monitoring data, process evaluation and impact evaluation - and different actors such as line agencies, programme managers and politicians.

All four countries have established national M&E policies, the adoption of which provides a framework for the institutionalisation of the use of evidence. The Office of the Prime Ministry produces a Government Annual Performance Report (GAPR) reporting monitoring indicators across the causal chain. GAPR is discussed twice a year at a cabinet retreat in which Ministers are held to account for sectoral performance. The Government Evaluation Facility supports studies to analyse issues identified from GAPR. In addition to having a similar monitoring system to that in Uganda, South Africa has an annual programme of both process and impact evaluation, and has developed an approach of working with programme managers from line agencies to tailor evaluation reports to evidence needs. Politicians are important policy stakeholders who are frequently ignored. Ghana has recently created a Ministry of Monitoring and Evaluation. The African Parliamentarian Network on Development Evaluation was founded in 2014 to enhance the capacity of African Parliamentarians to improve their oversight, policy making and national decision making by ensuring it is evidence based. The presentation will draw on experiences from the network on engaging politicians in the evidence agenda.

There will be a general Q&A for the audience.

Facilitators:

Howard White

Target audience:

Both researchers and policy makers will interested in this session. It is likely that most African participants will attend this session, but those from elsewhere interested in learning more about experiences in use of evidence may also attend.

Type of session:

Presentations with an audience Q&A

Other contributors:

Sabi W1, Byamugisha A2, Goldman I3, Musyoka S4

1 Deputy of the Minister of Monitoring and Evaluation, Ghana

2 Office of the Prime Minister, Uganda

3 The Presidency, South Africa

4 Member of Parliament, Kenya

Rigorous and relevant systematic reviews: Lessons learned from mixed-methods approaches in international development

Target audience:

This special session will be open to all Summit participants. In particular, researchers, commissioners of systematic reviews and policy or programme decision makers working on topics of relevance to low- and middle-

income countries will benefit from attending. It is desirable for participants to have intermediate knowledge of systematic review methodologies to facilitate a more targeted and efficient interaction with the audience.

Objectives:

Systematic reviews in international development can incorporate different methods to answer relevant questions for policy makers. Drawing on presentations from three rigorous and relevant reviews, the special session has two aims. The first is to foster understanding and dialogue among researchers and commissioners of the benefits and challenges of conducting rigorous mixed-methods reviews. Secondly, the session will discuss lessons learned in question setting, user engagement, process management, methods and presenting policy findings.

Description:

3ie estimates there are now more than 600 ongoing or completed systematic reviews of international development interventions. Many of these reviews have been commissioned by policy organisations who need findings that are relevant for decision making. This has led to more interest in conducting mixed-methods reviews by policy makers, practitioners and researchers. The nature of such reviews allows evidence not just on what works and for whom, but how and why. Nevertheless, there are both practical and methodological challenges in ensuring relevant reviews are of high quality and timely.

The session will feature examples of three mixed methods - Campbell International Development Coordinating Group (IDCG) systematic reviews on agricultural certification, women's employment and sanitation and hygiene programmes. Presenters will share their experiences in conducting mixed-methods reviews, focusing on lessons learnt for ensuring reviews were both rigorous and relevant. The second part of the panel discussion focuses on audience participation in the discussion, facilitated by IDCG editorial staff.

The session will include short presentations and facilitated discussion with all participants:

We propose the following topics for discussion:

- Systematic scoping for rigorous and relevant systematic reviews.
- User engagement for relevant systematic reviews.
- Quality appraisal for incorporating relevant qualitative evidence.
- Review team coordination for integrating quantitative and qualitative evidence .
- Making sense of different causal chains using mixed-methods evidence.
- Translating findings into quantities that are understood by policy makers.

Facilitators:

Ami Bhavsar

Target audience:

Researchers, commissioners of systematic reviews and policy or programme decision-makers working on topics of relevance to low and middle income countries will benefit from attending.

Type of session:

The session will take the form of several short oral presentations, an interactive exercise and a discussion session. Oral presentations will be short (5-10 minute) introductions of a topic and will be followed by a breakout session with group discussions with all attendees taking part. The group discussions will focus on key issues, such as question setting, user engagement, process management, policy findings and dissemination approaches.

Other contributors:

Tsoli S1, de Buck E1, de Buck T1, Oya C1, Snilstveit B1

Concurrent Session B

Evidence and gap maps: A systematic approach to scoping

Target audience:

Researchers conducting scoping studies, systematic reviews and/or impact evaluations, and users wanting to understand approaches to evidence mapping. The session will also be useful for individuals and organisation which propagate evidence-based policy agenda. The session is appropriate for participants of any level.

Objectives:

This session will explore commonalities and differences in various methodological approaches toward evidence mapping (evidence and gap maps, EGMs), Illustrate recent examples of EGMs, and discuss their use in informing research and policy. The session is part of the process for the Campbell Collaboration to establish policies and procedures for publishing EGMs in the Campbell Library.

Description:

The session will commence brief presentations by each panellist followed by a moderated discussion and active interaction with the audience. The first presentation by Campbell is a review of different approaches to producing and using evidence maps by different organisations (Collaboration for Environmental Science (CEE), EvidenceMap.org, Evidence Based Synthesis Program (ESP), Evidence Gap Maps (3ie), Scientific Uncertainties (SBU), and Global Evidence Mapping Initiative). 3ie will then present a map of maps in the international development sector, the 3ie online platform for the visualisation of evidence maps, and adding gender and equity dimensions to evidence maps. The Centre for Evidence and Implementation will give an outline of the EGM in the context of children at risk which is one of the EGMs in the Campbell Collaboration's EGM pilot programme. The final by Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) will demonstrate their approach identifying evidence gaps ('scientific uncertainties') and their use to inform policy and research with examples.

The proposed format for the discussion is as follows:

- Chair gives brief introduction of panelists and discussion guidelines – 5 minutes.
- Panelist position presentations (15 minutes each).
- Moderated discussion (10-15 minutes).
- Audience interaction (15-20 minutes).

Sample questions in addition to those from audience are:

- How is the scope of evidence maps determined?
- Are EGMs a complement or substitute for traditional scoping studies?
- What can be done to leverage the introduction and use of EGMs at a larger scale?
- What is being done to build capacity for EGMs?

Facilitators:

Howard White

Ashrita Saran

Aron Shlonsky

Birte Snilstveit

Christel Hellberg

Target audience:

Researchers conducting scoping studies, systematic reviews and/or impact evaluations, and users wanting to understand approaches to evidence mapping.

Type of session:

Short presentations, with roundtable/conversation hour through active participation of the audience.

Impact and evaluation of research: Perspectives from funders and users of research

Length of session:

90 minutes - 45 minutes panel presentations, the remaining 45 mins will be dedicated to questions from the audience to identify salient messages and ideas that will be followed up by ESSENCE in its interaction with member agencies and beyond.

Description:

The panel is convened by the ESSENCE on Health Research initiative - an international collaboration between research funders, development agencies, philanthropists and multilateral initiatives. The issues of research evaluation, impact, use of evidence and ultimate improvement of health outcomes have been a focus of the initiative since its inception. This includes development of an ESSENCE good-practice document called Six Practices to Strengthen Evaluation in Global Health Research in LMICs as a tool to generate discussion among anyone with a stake in improving research evaluation in LMICs, whether they are funders, researchers or policy makers. The document provides practices with illustrative examples and case studies that show how the practices have been used in practice, and identifies common barriers to their implementation, together with suggestions on how they can be addressed. But most funders and implementers of research find it very difficult to get know effective interventions to be used. Because the practices were developed from the experiences of funders, researchers and research institutes engaged in research capacity strengthening, there is something in it for everyone.

Objectives:

The objective of the panel is to share perspectives from various funding agencies, evidence users and other stakeholders on the impact of research investments.

Panel scenario:

Panelists will be invited to bring their perspectives on various topics, including how funders measure impact of research, what is the role of funded research in developing the evidence for decision making, what are the current impact/evaluation methods, including examples from the ESSENCE good-practice document and other topics.

Panelists:

- Maria-Teresa Bejarano, Swedish Development Co-operation Agency (Sida), Sweden;
- Annica Wayman, US Agency for International Development (USAID), USA;

- Katherine Littler, Wellcome Trust, UK;
- Richard Gordon, MRC South Africa;
- Iqbal Parker, Academy of Science of South Africa (ASSAf);
- Pamisha Pillay, Sothern African Research and Innovation Management Association (SARIMA).

Facilitators:

Linda Kupfer

Garry Aslanyan

Target audience:

The session is appropriate for any level – and should be interesting to all participants in GES.

Type of session:

Panel discussion followed by questions from the audience.

Evidence-informed policy making within and beyond health: Lessons learnt from initiatives using different forms of engagement

This session is linked to Plenary 1: EVIDENCE FOR AFRICA: How evidence is changing communities across one continent

Developing policy and implementing it is complex. To inform the decision-making process, the actors need reliable research evidence which is fit for purpose. Engagement between researchers and policy makers, and timing/timeliness increase both the usefulness of research and the prospects for research use. There is increasing interest in co-development and co-production of research evidence, and engaging end-users is key to this process. This session will feature lessons learnt from initiatives using a range of different forms of engagement between the relevant actors.

Short presentations by panelists (10 minutes each)

Short presentations by panelists (10 minutes each)		
Topic	**Panelist**	**Key questions that will be covered**
Rapid Response Services	Rhona Mijumbi	What approach did you take? Barriers/facilitators? What difference did engagement make to: a) the usefulness of the evidence; and, b) its use in decision making?
Department of Planning, Monitoring and Evaluation - Co-production of evidence	Harsha Dayal	
GESI - Strenthening capacities in LMICs	Fadi El-Jardali	
Policy BUDDIES	Pierre Ongolo Zogo	

Panel discussion (30 minutes)
Panelists to consider: What do policy makers want? What are the key success factors for meaningful engagement? Competing interest - relevance vs. validity of research process?
Round up

Brief biographies of panelists:

Session Chair: Etienne V. Langlois, WHO Alliance for Health Policy and Systems Research.

Etienne V. Langlois is an epidemiologist specialized in health systems research, maternal and neonatal health care services, and evidence synthesis. Trained in medicine, global public health and epidemiology, he is affiliated with the Alliance for Health Policy and Systems Research, based at the World Health Organisation (WHO) in Geneva. He manages portfolios of work on primary health care, implementation research and health systems strengthening, placing evidence-to-policy at the centre of its scientific activities. Dr Langlois has conducted research on skilled birth attendance and postnatal care services in low- and middle-income countries (LMICs), as well as methods to advance embedded research and health systems research synthesis. He recently co-edited the publication titled Rapid Reviews to Strengthen Health Policy and Systems: A Practical Guide, and published in scientific journals including The Lancet, BMJ Open, and the Bulletin of WHO. His previous positions include researcher and lecturer in clinical epidemiology and global health at the Faculty of Medicine of the University of Montreal, Canada. He lived in Burkina Faso and worked in various LMICs, an experience which led him to be a strong advocate of evidence-informed interventions to support health equity and universal health coverage.

Rhona Mijumbi is a public health physician, and health policy analyst and evaluator based at Makerere University, College of Health Sciences. A graduate of Clinical Epidemiology and Biostatistics (Makerere University, Uganda) and of International Public Health (University of Queensland, Australia), Dr Mijumbi is also a doctoral candidate of health policy at Makerere University having completed her coursework at McMaster University, Canada. She is an experienced researcher and knowledge-translation specialist, having led the establishment of the REACH Policy Initiative (Uganda) rapid response service for health systems evidence, the first of its kind in a low- and middle-income country. She is involved in ongoing research focused on health systems and policy in low-income countries.

Ms Harsha Dayal - Director: Research Management, Department of Planning, Monitoring and Evaluation, South Africa. Ms Dayal currently works as the director of research in the Department of Planning Monitoring and Evaluation within the Presidency of South Africa. Research experience in poverty, public health, gender and disability studies gained during her employment at the Human Sciences Research Council from 2007 to 2014 has provided her with the necessary experience and skills in bridging the research community and policy makers towards critical national priorities grounded in the Social Sciences. She has a Master’s degree in Public Health and is a qualified Occupational Therapist serving the public-health sector from 1993 to 2007. In addition, she provided secretariat support during the development of the National Health Insurance and currently serves on several reference groups as a researcher and senior public manager. She strives towards bringing together the two worlds of research and policy in transforming society and pursuing developmental objectives.

Fadi El-Jardali is based at the American University of Beirut where he holds the following positions: Associate Professor of Health Policy and Systems; Director of the Knowledge to Policy (K2P) Center; Co-Director of the WHO Center for Systematic Reviews in Health Policy and Systems Research (SPARK); Research Program Director for the

Research, Advocacy and Public Policy (RAPP) Program in the Arab World at Issam Fares Institute for Public Policy and International Affairs; and Co-Director of the Nodal institute. He is also an Associate Professor (part-time) at the Department of Clinical Epidemiology and Biostatistics, McMaster University. His research activities, publications and interest are focused on health policy making, knowledge translation, governance, performance reporting for health systems and organisations, quality of care, accreditation, patient safety, and human resources for health. He has led multi-country initiatives and projects in several countries and regions. He has published in international and regional peer-reviewed, high-impact-factor journals. He has worked and held senior positions with policy analysis-related organisations such as the Ontario Ministry of Health and Long-Term Care (as Hospital Consultant), federal department of health / Health Canada (as Senior Policy Advisor), and the Health Council of Canada (as Health Economist and Program Manager).

Pierre Ongolo-Zogo, Director of the Centre for the Development of Best Practices in Health (CDBPH) in Cameroon, has extensive involvement at the international level in strengthening health systems and supporting evidence-informed policy making. CDBPH participated in the WHO task force for developing guidance for health-systems interventions. Pierre was on the Scientific Advisory Panel for the World Health Report 2012, Selection Committee Canada Grand Challenges Point of Care Devices, Reviewer BMC Health Policy and Services Research, Session Chair on KT for improved management of human resources for health during the First Global Symposium on Health Systems Research 2010, and Scientific Advisory Committee Second Global Symposium on Health Systems Research. Pierre lead the implementation of the Policy BUDDIES project in Cameroon.

Facilitators:

Etienne Langlois

Ruth Stewart

Taryn Young

Target audience:

Policymakers

Type of session:

Few short presentation followed by panel discussion

Other contributors:

Gilson L1, Mijumbi R2, Dayal H3, El-Jardali F4, Ongolo-Zogo P5

1

2 Makerere University, College of Health Sciences, Uganda

3 Department of Planning, Monitoring and Evaluation, South Africa

4 American University of Beirut, Lebanon

What can evidence-based education and healthcare learn from each other?

This session will cut across the four themes of the conference:

- Evidence production: Abstracts concerning primary research production.

- Evidence synthesis: Abstracts concerning different forms of research synthesis: overviews, scoping reviews, systematic reviews, etc.
- Evidence tools: Abstracts concerning guidelines and other knowledge-translation methods and tools.
- Evidence implementation and evaluation: Abstracts concerning getting evidence into policy and practice.

Objectives:

Exciting opportunities for cross-sector collaboration and learning are emerging between healthcare and education in relation to developing evidence-informed policy and practice (BMJ 2017;357:j2234). In this session, participants will discuss opportunities for advances in both fields through the exchange of ideas and innovations, sharing of mistakes and successes, and collaboration on common goals.

Description:

Education can benefit greatly through learning from the established processes and practices in healthcare, whilst recent developments in education can reinvigorate the evidence-based medicine agenda. A shared agenda is emerging on two fronts: on practical topics that cross both fields and on common methodological and conceptual issues. One shared area of interest, critical thinking, will be discussed as an example of needs and opportunities for collaboration. In education, there is increasing emphasis on the need to developing critical thinking skills, beginning in primary schools, both to improve academic outcomes and to promote wider reasoning and problem-solving capabilities. In healthcare, critical appraisal is a specific subset of critical thinking applied to the use of research evidence to inform health decisions, which has been the focus of evidence-based medicine. The discussion in this session will include both small and large group discussion. It will be structured around three topics:

1. Evidence-informed guidance for teaching critical appraisal skills and for teaching critical thinking What are we doing now to teach these skills, how effective are we, and what lessons have we learned? What guidance is currently available and what evidence is there to inform such guidance?
2. Designing and evaluating effective approaches to teaching these skills What is needed to improve teaching of these skills, and how should we go about developing and evaluating more effective approaches?
3. Other opportunities for collaboration How can evidence-based education and healthcare collaborate to improve critical thinking skills and other shared goals.

Facilitators:

Andy Oxman

Sandy Oliver

Target audience:

Everyone interested in using evidence to improve education and healthcare and in collaboration between efforts to support well-informed decisions in education and healthcare.

Other contributors:

Sharples J1, Boruch B2

1 Education Endowment Foundation, UK

2 University of Pennsylvania, USA

Implementation and translation frameworks in low- and middle-income countries, international collaboration

Objectives:

Diverse theories and approaches exist for the implementation of evidence in practice. These frameworks for knowledge translation are predominantly described and delivered in developed countries. The Global Evidence Summit offers an opportunity to bring together individuals and organisations active in health and social research to share experiences and learnings of the application of implementation and knowledge translation frameworks in LMIC and the role of international collaboration.

Description:

The 90 minute session will include brief presentations by each panelist and facilitated discussion/conversation with the audience.

1. Implementation specialists from health and social research will briefly present key features of frameworks used in their fields (2x12 minutes)

2. Case studies from health and social sciences including primary care in Africa and acute care in Asia will illustrate how existing frameworks have been used in practice. Theme for each of the cases studies will be relevant to women's health. (3x10 minutes)

3. Presenters will join a panel to stimulate a facilitated open discussion forum with all attendees. Key questions the forum may consider include: (35 minutes)

    - Can frameworks for knowledge translation developed in western health systems readily be applied in LMIC? How do they overcome contextual issues unique to LMIC?

    - What have the GES partner organisations' done to foster use of evidence in decision making in LMIC to date? What more can they do?

    - What does meaningful collaboration in knowledge translation in health and social research look like in LMIC?

    - Does involvement of international organisations help or hinder the implementation of evidence in practice in LMIC?

    - How can organisations work together to foster implementation of knowledge translation frameworks in decision making?

Following the examples presented in the case studies, attendees will be encouraged to raise their own questions and share their experiences, learnings and views.

Facilitators:

Zoe Jordan

Craig Lockwood

Paul Ronalds

Patrick Okwen

Yingfeng Zhou

Target audience:

This session is designed for people with an interest in the use of evidence in practice, particularly from LMIC, including policy makers, health care practitioners, researchers and others. No prior knowledge is required.

Type of session:

The 90 minute session will include brief presentations by each panelist and facilitated discussion/conversation with the audience.

Global evidence, local needs: Lessons from practical philosophy about using different knowledge

Target audience: Guideline and systematic review developers; users of guidelines and systematic reviews, including practitioners and policy makers.

Level of knowledge required is basic – a basic understanding of evidence-based practice is needed, no prior knowledge of philosophy is required. Participants should be interested in the use of evidence in local contexts and how practical philosophy can support our understanding and use of different knowledge.

Objectives:

Practical philosophy aids understanding that enables participants to integrate evidence to produce guidelines and systematic reviews for complex, real-world practice.

Description:

Policy or clinical recommendations cannot solely rely upon evidence from meta-reviews of large, randomised studies (1). They often need to draw upon multiple types of knowledge to achieve knowledge translation (2-4). Novel practices of evidence integration are increasingly informed by philosophical concepts on complex causality. These make explicit the epistemological choices involved in making an inference and their methodological consequences (6-8). Recent approaches describe how evidence appraisal and synthesis can incorporate and accommodate diverse knowledge needs (6, 9, 10). So we ask, 'How can different types of knowledge help provide guidance in real-world settings? What can we learn from philosophical understandings of inference, prediction and explanation (11)?'

Key examples from contexts that are complex, resource constrained and human rights sensitive show how approaches that move beyond traditional understandings of methodological rigour are needed. Although these contexts are found around the world, the global South may well be a forerunner when it comes to innovative evidence assessment. This Special Session and its accompanying three workshops open an active dialogue between innovative evidence synthesis practices and cutting-edge developments in the philosophy of knowledge.

Session structure:

Three empirical cases on knowledge synthesis, followed by philosophical responses and interaction with the audience.

Session chair:

James Thomas

General introduction and session outline:

Jackie Chandler and Teun Zuiderent-Jerak

Case 1: Outbreak prevention and control

Presenter: Rodrigo Pardo Turriago on Zika and observational knowledge in the Americas

Discussant: Jon Williamson on Mechanistic reasoning

Case 2: Complex interventions in social care

Presenter: Beth Shaw on Social care guidance in NICE

Discussant: Jackie Chandler on Complex causality

Case 3: Standards for gender and human rights

Presenter: Teun Zuiderent-Jerak on Transgender guideline in Argentina

Discussant: Sietse Wieringa on ethical assumptions in evidence

Discussion with the audience: focus on questions raised by and lessons learned from the dialogue.

Overall discussant: Trish Greenhalgh (University of Oxford)

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7. Reiss J. Causation, Evidence, and Inference. 2015: Routledge.
8. Verran H. Science and an African Logic. 2001, Chicago: University of Chicago Press.
9. Lukersmith S, et al. A new framing approach in guideline development to manage different sources of knowledge. J Eval Clin Pract, 2016 - online first.
10. Harder T, et al. Towards a framework for evaluating and grading evidence inpublic health. Health Policy, 2015. 119(6): 732–736.
11. Illari P and Russo F. Causality: Philosophical theory meets scientific practice. 2014: Oxford University Press.

Note that this Special Session consists of a track of three events: the following two workshops are connected to this session:

Workshop 1: Understanding context in evidence synthesis and guideline development.

Workshop 2: Applying current philosophical insights on causality using qualitative comparative analysis as an additional synthesis in systematic reviews to address complex interventions.

Facilitators:

Jackie Chandler

Teun Zuiderent-Jerak

Target audience:

Guideline and systematic review developers; users of guidelines and systematic reviews, including practitioners and policy makers.

Type of session:

This session will introduce philosophical accounts around real-world problems through three short presentations with philosophical reflections followed by two overall discussants. After an initial Q&A, participants will talk with their neighbours on specific question, then share highlights in a managed large group discussion including the panel.

Other contributors:

Greenhalgh T1, Kyamanywa P2, Shaw B3, Thomas J4, Pardo Turriago R5, Williamson J6, Wieringa S7

1 Oxford University, UK

2 Rwanda

3 National Institute for Health and Care Excellence, UK

4 University College London, UK

5 Universidad Nacional de Colombia, Columbia

6 University of Kent, UK

7 University of Oslo, Norway

Concurrent Session C

A panoramic view of rapid reviews: Uses and perspectives from global collaborations and networks

Purpose:

To exchange ideas about how rapid reviews have evolved as a useful information tool to support evidence-informed policy and practice.

Objectives:

1. Participants will have the opportunity for information sharing with rapid review producers, decision-makers and providers, and representatives from organizations interested in rapid reviews;

2. Participants will have the possibility to discuss all aspects regarding the production and application of rapid reviews;

3. Participants will have a platform to discuss current and future research aims in order to advance the science of rapid review methods.

Description:

This session is a platform for various international groups and collaborations to convey their experiences with RRs through various lenses including those of systematic review producers, guideline developers, and those undertaking RRs specific to health policy, in particular for LMICs. We will have 6 rapid presentations by representatives from the Cochrane Rapid Reviews Methods Group (RRMG), Cochrane Response, Campbell Collaboration/ International Initiative for Impact Evaluation (3ie), Guidelines-International-Network (G-I-N), WHO Guideline Review Committee, and the WHO Collaborating Centre for Evidence-Informed Policy and Practice. This will be followed by a 30-minute panel discussion involving audience participation with the aim to discuss the strengths and weaknesses of using RRs to inform decisions, to learn about other ongoing RR initiatives, and to provide insight for those considering the use of RRs in their contexts. A standard set of questions will be used to guide the discussion. Our anticipated outcome is to showcase the relevance of rapid reviews, and to harness interest in growing a network of those involved with this type of knowledge synthesis methodology.

Facilitators:

Chantelle Garritty

Valerie King

Adrienne Stevens

Karla Soares-Weiser

Daniel Phillips

Susan Norris

Michel LAURENCE

Barbara Nussbaumer-Streit

Gerald Gartlehner

Target audience:

Individuals and groups from across various sectors with an interest in generating or using evidence from rapid reviews. The session is appropriate for any level (basic).

Type of session:

Mixture of short presentations (2/3) and interactive discussion (1/3) with attendees (rapid review stakeholders).

Other contributors:

Akl E1

1

Evidence to action: Start with the action

This session is linked to Plenary 1: EVIDENCE FOR AFRICA: How evidence is changing communities across one continent

How to ensure that research and evidence synthesis results make a difference?

The Consortium for Effective Health Care, going back 20 years, has a single performance indicator that our funder measures us on: To increase the number of decisions in the health sector based on reliable evidence. To achieve this, we start with the action or decision that is anticipated and uses this to steer our priorities. It's important to actively consider our customers' needs to inform review portfolios, informing which reviews are done, and how they are done, in relation to the emerging policy windows. There are times too when the science and the evidence may need to challenge the beliefs, and influencing decisions in these areas is more complicated.

A variety of presenters and projects will share our work and their experiences.

HIV and qualitative synthesis

Dr Ingrid Wilson, HIV clinician and researcher in Cape Town, and HIV Cochrane editor

Ingrid describes her work in qualitative synthesis to help inform policies for good adherence to antiretroviral treatment. This came out of the inadequacy of trials to help inform adherence promotion in Africa.

Malaria chemotherapy guidelines: partnership to improve policy

Dr Joseph Okebe, clinician and malaria research specialist in The Gambia, and malaria Cochrane editor

Joseph outlines the partnership with the World Health Organization malaria chemotherapy group in providing evidence and methods development over the last 20 years.

Mass drug deworming: improves a country's economic development?

Dr Sophie Jullien, paediatrician working in Bhutan and Cochrane author

Sophie critically appraised some iconic long term development economics studies, found evidence of repeated and iterative statistical testing. Her work challenges the mantra that deworming children boosts a country's economic development.

INDEX-TB guidelines: India leads standards in extrapulmonary TB

Dr Neerja Nischal, assistant professor at the All India Institute of Medical Sciences, with Dr Hannah Ryan, TB Cochrane editor

The Indian Government led TB guideline development, and a team from the Cochrane Infectious Diseases Group responded with focused reviews and updates to guide the panel, and helped assure strong methodological processes.

MVA85A TB vaccine trial in animals: used in translation decisions?

Dr Rufaro Kashangura, medical officer in Swaziland and Cochrane author

Rufaro carried out a systematic review of animal experimentation studies that highlighted areas of poor practice in the reporting of animal studies for a new TB vaccine. The implications of this review are wide, and extend to the need for prospective animal protocols and registers being available, better reporting and timely publication of results.

Facilitators:

Paul Garner

Taryn Young

Target audience:

People that produce systematic reviews, fund them, or use them. People that organize systematic review production and guidelines. People interested in approaches to guideline development at national level.

Type of session:

This session will share experiences and lessons learnt in conducting evidence synthesis through starting with the action or decision that it is anticipated the evidence will inform. Presenters from various regions who have been involved in various types of synthesis will be sharing their experience in responsive review conduct.

Other contributors:

Wilson I1, Okebe J2, Jullien S3, Nischal N4, Kashangura R5

1 , South Africa

2 , The Gambia

3 , Bhutan

4 , India

5 , Swaziland

Concurrent Session D

"Guidelines meet shared decision making. Happy ever after?"

Evidence-based medicine became relevant to all when guidelines were born and given special status, raising the stakes on how to summarise evidence from population-based research. But clearly, patients are not populations, they have quirks, opinions, stories to tell and preferences that cannot be predicted by asking for blood test results. Shared decision making, favourite granddaughter of patient-centred care from the hip 1970s, has met her match in guidelines, and they have been caught flirting, with the rumour of a few fights as they try to work out whether this is a fling or a thing. This goal of this session is to suggest the relevant questions that the advocates of guidelines and shared decision making may want to ask each other.

Topics	***Format***	***Minutes (Cumulative)***
Strange bedfellows - guidelines and shared decision making	Goals and introductions by panel speakers	5 (5)
Speaking the same language Glyn Elwyn Guideline developers have a specific terminology, and although evolving, the words arose from a different perspective, based on deriving the certainty of effect for different groups of people. Shared decision making views the world as one where uncertainty reigns, and where the views of individuals has primary legitimacy and relevance, the more so when there are high degrees of equipoise among relevant options.	Speaker Discussion	5 5 (15)
Guidelines - Patient decision aids? Is harmony possible? Thomas Agoritsas This is about the relationship between guidelines and patient decision aids - should be co-designed, part of the same development system? What examples do we have of success? Or is this just a paradigm clash?	Speaker Discussion	10 5 (30)
Guidelines - What about preferences? What can we do? Lyndal Trevena Preference construction is complex. Are guidelines capable of containing these concepts or methods? Are these methods even necessary? What benefit do they bring? Is this where clinical expertise needs to step in?	Speaker Discussion	8 7 (45)

Guidelines - What about goals? Glyn Elwyn Are patient goals more important than the outcomes that science suggests?	Speaker Discussion	10 5 (55)
Back to language again Brian Alper The terminology suggested by GRADE is becoming dominant - but will it prohibit a relationship between guidelines and shared decision making? Can they be happy ever after?	Speaker Discussion	8 7 (70)
Plenary discussion	Discussion	20 (90)

Facilitators:

Glyn Elwyn

Target audience:

All attendees

Type of session:

Special session.

Other contributors:

Alper B1, Trevena L1, Agoritsas T1

1 ,

The inefficiency of isolation: Why evidence providers and evidence synthesisers can break out of their silos

This session is linked to Plenary 2: BREAKING DOWN THE SILOS: Digital and trustworthy evidence ecosystem

Objectives:

a. To increase participants' understanding of how changes to the way primary research is designed and shared can make synthesis more efficient.

b. To highlight work under way to improve the links between evidence producers and evidence synthesisers.

c. To increase participants' understanding of how new approaches to evidence synthesis are contributing to evidence ecosystems.

d. To give participants the opportunity to discuss challenges in the path from evidence production to synthesis with an expert international panel and their peers.

Description:

This session will highlight the challenges of improving the quality and availability of primary research evidence, how links between primary research and evidence synthesis can be improved, and examples of new systems for evidence synthesis. It will also allow an opportunity for discussion and debate about how substantive progress can be made.

The four talks will be:

1. The problems of poor and siloed primary research - a funder's view (Matt Westmore).

2. New ways to access primary research data (Ida Sim).

3. Data journeys from studies to accelerated evidence synthesis (Anna Noel-Storr).

4. Connecting primary research and synthesis in education - experiences of operating in a linked system (Jonathan Sharples)

The facilitated discussion will give participants the opportunity to pose questions to the panel, as well as allow further discussion on wider challenges and practical ways forward. Both the talks and the discussion will consider the applicability of the current ecosystem model to non-health challenges. Participants need no prior knowledge of the topic area to benefit from attending.

Facilitators:

Julian Elliott

Anna Noel-Storr

Heidi Gardner

Matt Westmore

Ida Sim

Jonathan Sharples

Target audience:

those interested in improving the relevance & utility of primary research and evidence synthesis to decision makers; improving the interactions between the primary research community & those who synthesise primary research

Type of session:

The session will comprise four, 15-minute talks followed by a facilitated 30-minute panel discussion with the speakers.

Other contributors:

Treweek S1

1 University of Aberdeen, UK

Facilitating evidence-informed decisions about complex interventions

This session will benefit policy makers, guideline developers and academics who work in the field of systematic reviews and research synthesis, guideline development and implementation. This session is aimed at participants with any level of knowledge.

Objectives:

- to present new concepts and proposed methods for developing questions for systematic reviews and guidelines, synthesising and appraising the evidence, and formulating recommendations that involve complex interventions in complex systems; and,
- to elicit feedback on proposed additional criteria for the evidence-to-decision framework used when formulating recommendations related to complex interventions.

Description:

The session will begin with five short presentations on the principal elements of research synthesis and guideline development for complex interventions and systems:

1. Conceptualising complex interventions – What are the implications of complex systems for systematic reviews of complex interventions? For framing the review question?
2. From evidence to recommendations – Can the current GRADE/DECIDE criteria do justice to complex interventions? Are additional considerations needed?
3. Quantitative data – How can systematic reviews of complex interventions best assess and reflect the inherent variability across studies in terms of contexts, participants, interventions and outcomes? How should quantitative evidence be synthesised and presented when meta-analysis is not feasible?
4. Qualitative data – For what types of questions are qualitative data and mixed-methods syntheses likely to add value? What are the options for synthesising such evidence?
5. Assessing the quality (certainty) of the body of evidence – Does the GRADE approach need to be modified for complex interventions?

This will be followed by a question-and-answer session and a discussion focusing on several key questions posed by the presenters. An interactive audience response system will be used to receive feedback on proposed additions to the current GRADE/DECIDE evidence-to-decision framework.

Facilitators:

Susan Norris

Target audience:

policy makers, guideline developers and academics who work in the field of systematic reviews and research synthesis, guideline development and implementation.

Type of session:

Presentations followed by a discussion with specific questions for different segments of the audience, such as systematic reviewers, guideline developers and policy makers.

Other contributors:

Petticrew M1, Rehfuess E2, Higgins J3, Noyes J4, Montgomery P5

1 London School of Hygiene and Tropical Medicine, UK

2 Ludwig-Maximilians-Universitat München, Germany

3 University of Bristol, UK

4 Bangor University, UK

5 Oxford University, UK

Mapping the evidence: Different approaches to evidence mapping across disciplines

Target audience:

This session will be aimed at stakeholders with evidence needs (policy and practice decision makers), researchers with an interest in synthesis (reviewers), and research funders. Systematic mapping methods are of broad interest to a wide range of stakeholders because of their ability to answer different questions to those answered by systematic reviews: they focus more on what we know. This is particularly interesting to policy makers as they seek to find out whether existing or new policies can be based on evidence. Funders also benefit from knowing about evidence gaps that require further funding, or topics that have enough evidence to be systematically reviewed. Evidence synthesis researchers can learn much from mapping methods: potentially adding value to their systematic reviews as well as using mapping as an independent method. The facilitators and contributors described above will help to bring a broad group of interested researchers, decision makers and other stakeholders to the session, and it is hoped that the interactive nature of the session will allow a multilateral flow of knowledge and experience. The session assumes an existing knowledge of systematic reviews or associated evidence synthesis methods and is therefore set at an intermediate or advanced level.

Description:

Evidence mapping has been used to collate and describe bodies of research, particularly the study settings and methods used, without extracting or synthesising study findings. As these methods have developed, methodologists have attempted to visualise evidence in different ways to facilitate understanding and integration of synthesis results into decision making. This special session will involve six short presentations outlining different approaches to evidence mapping and visualising complex evidence bases along with stakeholder perspectives on mapping as an evidence synthesis product. Firstly, a systematic review of methods used in evidence mapping will be presented as a primer to the methodology. Systematic mapping will then be introduced as a method for summarising an evidence base in a transparent, repeatable and comprehensive way. Two stakeholders from UK and South African government departments will discuss their appreciation for evidence maps as synthesis products for use in decision making. Evidence gap maps will be summarised as a means of identifying gaps in currently synthesised knowledge of a topic, developed in the field of international development. Finally, recent developments in visualising synthesised evidence will be discussed, including evidence atlases and heat maps. Following these presentations there will be a time for participants to interact and discuss what evidence mapping means for them as researchers, as decision makers or as other types of stakeholders. In this breakout session, attendees will form small groups and be asked to consider benefits of mapping relative to systematic reviews and how evidence could be better visualised. A group discussion will then summarise these discussions. One of the key outputs of the special session will be a collated list of recommended developments that could improve future approaches to evidence mapping. Evidence mapping is an emerging method under continued development, and this session provides a valuable opportunity to learn and refine these methods based on in-depth discussion with a range of stakeholders.

Facilitators:

Neal Haddaway

Samantha Cheng

Birte Snilstveit

Isomi Miake-Lye

Target audience:

This session will be aimed at stakeholders with evidence needs (policy and practice decision-makers), researchers with an interest in synthesis (reviewers), and research funders.

Type of session:

This session will take the form of several short oral presentations, an interactive exercise and a discussion session. Oral presentations will be short (5-7 minute) introductions of a topic and will be followed by breakout sessions and group discussions with all attendees taking part.

Other contributors:

Randall N1

1 ,

Research synthesis priorities and guideline development: Linking evidence synthesis production to evidence needs

Guideline developers across the world and across health and clinical disciplines often find it challenging to obtain relevant evidence synthesis to produce guidelines in a timely and high quality manner. While some guideline developers maintain close relations with systematic review groups that can respond to their needs, others do not have these relations and rely on available evidence that often times does not respond exactly to their needs. Establishing inclusive priority setting processes, involving researchers, guideline developers, health care practitioners as well as consumers, is seen as one essential strategy to bridge the gap between evidence synthesis production and evidence synthesis needs.

This Special Session will share, through a series of examples, strategies used to bridge this gap. Examples include technological developments that will speed up systematic review production; strategies that focus on building long-term relationships between guideline developers and systematic review groups; as well as targeted evidence synthesis products developed in response to specific needs.

Presentations:

- Living systematic reviews (Anneliese Synnot)
- Cochrane Response/Targeted updates (Karla Soares-Weiser)
- ASH and McMaster collaboration (Holger Schünemann)
- Cochrane ENT and NICE (Martin Burton)
- Kaiser Permanente’s use of Cochrane/EPC systematic reviews (Craig Robbins)

The objectives of the session are to:

- Present solutions for bridging the gap between evidence needs and evidence production;
- Discuss these (and other) solutions and produce actionable suggestions for further decreasing this gap.

The Special Session will be organized jointly by G-I-N and Cochrane.

Facilitators:

Sylvia De Haan

Marguerite Koster

Nancy Santesso

Target audience:

Researchers, guideline developers and policy makers. Level: basic (no previous knowledge requested)

Type of session:

Interactive; 4 to 5 oral inputs, followed by discussion about priority setting for evidence needs of guideline developers.

Concurrent Session E

Evidence synthesis for health policy and systems: Approaches, challenges and stakeholder engagement

Target audience

- Researchers and policymakers
- Stakeholders actively engaged in:
    - Health systems decision-making and policymaking;
    - Supporting health systems decision makers and policy makers through evidence;
    - Conducting evidence syntheses relevant to health policy and systems.

Researchers and policy makers will be invited to the session to share their views on using evidence to inform health policy and systems decisions.

Objectives:

Policymakers and managers trying to make the best decisions for health systems policies and programmes, face a difficult task. Health systems are increasingly complex and evidence on the best approaches to resolving health policy and systems challenges can be hard to find, or can come from multiple sources that might not easily speak to each other. Health policy and systems researchers can however ease this burden by supporting policymakers, decision-makers and managers, through synthesising the best available evidence addressing these complex and context-sensitive challenges. This session will address different approaches in the field of health systems research synthesis, including lessons learnt in engaging health system stakeholders in the synthesis process.

Description:

1) Dialogue on the challenges and solutions to support the conduct and use of health systems research synthesis (30 minutes)

This dialogue will address the challenges, approaches and methods relevant to health systems research synthesis and the development of policy-relevant systematic reviews. Review centres established in LMIC settings will introduce their experience in conducting evidence syntheses, engaging end-users in the synthesis process and promoting their integration in policy and practice.

A health system decision-maker from South Africa will then speak to the relevance and uptake of health systems research synthesis to inform policy- and decision-making.

The presentation will be interactive, including an opportunity for questions and comments from participants after interventions by the presenters and decision-maker.

2) Break-out facilitated discussion (45 minutes)

The decision-maker will present policy challenges where input is required from evidence syntheses to inform health policy and strengthen health systems in LMIC settings. The policy and systems challenges presented by the decision-maker will serve as a basis to engage participants in a reflection on conducting and presenting reviews in ways that would facilitate their uptake in health policy and systems. This exchange of ideas will take place within breakdown facilitated discussion, outlined below.

Participants will be asked to reflect in small groups on the challenges identified by the policymaker. This exchange will be moderated by the facilitators who will prompt the group with various questions, including:

- What are good ways to stimulate the collaboration between reviewers and end-users?
- How to translate a policy issue into a reviewable question?
- What are good approaches to selecting review methods to answer health policy and system questions?
- How can we unpack and understand complexity and context-sensitivity in the field of health systems research synthesis?
- What are some key successes in supporting capacities for the conduct and use of reviews in LMICs?
- What are good practices in promoting the uptake of health systems research synthesis?

The five facilitators will coordinate the round table discussions and collate the key discussion points.

3) Feedback discussion and conclusion (15 minutes)

The last part of the session will be an opportunity for facilitators to revert back to the larger group and summarise the take-home messages from the round-table discussions. At this stage, the groups will share their reflections and recommendations on conducting and using health systems research to inform policy and systems decision-making.

Finally, the decision-maker will be asked to provide concluding remarks to reflect on how we can use these insights to improve real world evidence-informed-policymaking in LMICs.

Facilitators:

Etienne Langlois

Karen Daniels

Elie Akl

Target audience:

Researchers and policymakers.

Type of session:

In this session, participants will: 1) Discuss the challenges of using evidence synthesis to support health systems interventions and policies; 2) Discuss the relevance of conducting evidence synthesis in the field of health policy

and systems research, using various synthesis approaches, perspectives and methods; 3) Learn from good practices and experiences from review centres supported by WHO Alliance for Health Policy and Systems Research in conducting and fostering the uptake of review findings in LMIC contexts.

Other contributors:

Dayal H1, Sudhakar M2, Odendaal W3, El-Jardali F4, Lotfi T5, Moloi H3

1 Department of Planning, Monitoring and Evaluation, South Africa

2 Ethiopia Evidence Based Health Care Centre, Ethiopia

3 Health Systems Research Unit, South Africa

4 Center for Systematic Reviews of Health Policy and Systems Research (SPARK), Lebanon

5 Global Evidence Synthesis Initiative, Lebanon

New approaches to enhance evidence use through continued technical support and collaboration with policy makers and senior officials

Objectives:

This special session aims: to describe novel approaches for evidence translation and evidence use for capacity building at local, national and international levels; to solicit stakeholder feedback on newly developed approaches; and;,to discuss the value of developing implementation research capacity to influence intervention design and policy.

Description:

Novel approaches to be presented and discussed include:

1. The Indonesian experience with a National Evidence Summit on Maternal and Neonatal Mortality Reduction, highlighting the process of coordinating national technical and policy stakeholders to review and grade evidence and determine gaps.

2. The Kenyan experience with launching a national Health Data Collaborative, the first government to do so, bringing together a range of national and local stakeholders to support a unified 'One M&E Framework', to streamline the process of packaging and utilising national health data.

3. Experiences with participatory case example and case study development to translate of current research into useful forms, including through CaseMaker and the Implementation Research and Delivery Science (IRDS) Collaborative's IRDS Case Study Compendium;.

4. The Pan American Health Organization's Policy Guideline Development Course to build capacity among policymakers in evidence grading in support of evidence-based national health policy guidelines.

5. The USAID Health Evaluation and Applied Research for Development (HEARD) Project's IRDS agenda development process, which systematically solicits sub-regional and global community of practice implementation science priorities through participatory consultation, with support from Sub-Regional Anchor institutions, to better align evidence production with need.

The participatory session will involve a roundtable discussion with contributors experienced in implementing and supporting novel approaches to enhance evidence use through continued technical support and collaboration with policy makers and senior officials. The session is intended to be interactive and draw from audience inputs

and participation. The facilitators will moderate a dialogue between round table contributors and audience discussants. The facilitators will open with a 5-minute introduction of the topic and session objectives. The roundtable contributors will be asked to speak on their experiences for 5 minutes each. This will be followed by a moderated conversation with the audience (50 minutes). The moderator will facilitate audience participation to elicit questions, comments and other examples from audience members' experiences.

Facilitators:

James Sherry

Target audience:

Researchers and policy makers engaged in communicating, using, and/or building capacity to use research findings for evidence-informed decision making.

Type of session:

Stakeholder consultation and discussion.

Other contributors:

Brandes N1

1 ,

From reviews to guidelines and point-of-care evidence use

This session is linked to Plenary 2: BREAKING DOWN THE SILOS: Digital and trustworthy evidence ecosystem

Objectives:

a. To increase participants' understanding of how data from systematic reviews can be used in guidelines, in a way that increases transparency, efficiency and facilitates updates.

b. To highlight work done and tools created to improve the links between systematic reviews and guidelines, as well as disseminating evidence point of care.

c. To increase participants' understanding of how new approaches to guideline dissemination are contributing to evidence ecosystems.

d. To give participants the opportunity to discuss challenges in the path from systematic reviews to guidelines and point-of-care use of evidence with an international expert panel and their peers.

Description:

This session will highlight the challenges of disseminating evidence to patients and clinicians point of care, how links between systematic reviews and guidelines can be improved, and examples of tools and dissemination strategies. It will also allow an opportunity for discussion and debate about how substantive progress can be made.

The session will consist of an introduction, and four 15-minute talks, each followed by 5-minute questions from audience. The four talks will be:

1. Data from systematic reviews and their use in guidelines - Zachary Munn.

2. From evidence to well-informed decisions in policy and practice – Romina Brignardello Petersen.

3. Presentation formats for evidence at the point of care - Ton Kuijpers.

4. Evidence used for shared decision making – Thomas Agoritsas.

Participants need no prior knowledge of the topic area to benefit from attending.

Facilitators:

Gabriel Rada

Ton Kuijpers

Type of session:

Special session

Other contributors:

Brandt L1

1 University of Oslo, Norway

A dialog with funders: What approaches and activities ensure research achieves its expected impact?

[Old title: Global funding: Multi-agency approaches to knowledge translation/research uptake into action or bringing the research community into the policy decision-making process]

Objectives:

Share how funders work to support evidence uptake so that it has an impact. Different approaches and perspectives. This includes:

- Knowledge synthesis, creation of policy briefs, knowledge translation activities, bringing policy makers and knowledge managers together.
- Collaboration and coordination between funders

Faclitate discussion to explore additional approaches, challenges and needs of the evidence community to ensure evidence uptake.

Help build a base of knowledge of best practice, tools, & case studies that can have a positive impact on current and future programmes.

Description:

This session will present various ways in which funders are ensuring impact in research investment. What works? What are the ways in which funders engage with the evidence community both to support the most relevant and high quality primary research and evidence synthesis? What are funders doing to ensure the maximum impacts through pooling resource and supporting knowledge translation initiatives to inform guidelines, decision aids, implementation, and quality improvement.

What tools and activities faciliatate the translation of research evidence into policy and practice?

A panel with representatives from global funders will briefly present examples of approaches to knowledge translation that aim to ensure the benefits of research are accessible, available and can be used by health care providers, policymakers and patients.

This will be followed by a number of questions intended to start a robust dialog about additional approaches, what else can funders do, and how best to engage the evidence community to ensure impact.

The session aims to:

1. Showcase current approaches to research and evidence uptake
2. Stimulate learning about some specific initiatives
3. Increase insight into funders efforts to support knowledge translation into policy
4. Discuss challenges and barriers with a view to finding solutions
5. Discuss tools and activities that work
6. Share and explore additional ideas or examples of how best to ensure evidence uptake
7. Build the overall knowledge base on steps to ensure impact

Facilitators:

Kathelene Weiss

Sally Green

Katherine Littler

John Reeder

Sue Kinn

Target audience:

Researchers, Ethics Committee Members, Members of Funding Agencies, Policymakers and other evidence users, Journal Editors and Reviewers, Educators, Patients and Consumers, Information Specialists and Librarians

Type of session:

Presentation and followed by a few questions to generate discussion.

Other contributors:

Kern S1

1 ,

Concurrent Session F

Implementation, improved care and back again

This session is linked to Plenary 2: BREAKING DOWN THE SILOS: Digital and trustworthy evidence ecosystem

Objectives:

Provide insight into how evidence implemented by targeted clinical decision support (CDS) connects recommended actions to measured outcomes, how selecting effective interventions and monitoring outcomes needs a marriage of traditionally curated evidence and recommendations with big data collected from

individuals, and how a closed-loop programme of practice improvement develops professionals' implementation skills.

Description:

Nicolas Delvaux: Guidelines should be implemented by CDS in a patient-centred approach taking into account the individuals' characteristics, the context and timing of decision making, and the governance of continuous quality-improvement. The GUIDES checklist on effective CDS, and future directions of integrating evidence implementation and outcome measurement via CDS is discussed.

Thomas Kelley: Measuring what matters to people The presentation introduces the concept of value-based healthcare and how ICHOM is working to translate the theory into practice. The methodology for standard dataset development and two case studies on successful implementation in both developed and low/middle-income country settings are presented. The potential of using patient-reported data is discussed.

Gillian Leng: The whole circle – evidence, recommendations, and ongoing data collection. NICE undertakes a new approach to determining whether evidence-based recommendations for mental ill-health can be delivered more efficiently by digital technologies than by a traditional therapist. The technologies are initially assessed against criteria drawn from traditional randomised-controlled trials, and then introduced for use by patients, using real-world data for ongoing evaluation. Big data are used to predict who will benefit most.

Craig Lockwood: Facilitating practitioner-led implementation at the bedside. Implementation of evidence at the point of care forms part of a closed-loop programme including stakeholder established priority topics informing evidence synthesis and an evidence transfer programme inclusive of active dissemination and systems integration. The JBI clinical fellowship programme's online system guides participants through the process of improving practice. Case studies will be presented from low/middle-income countries.

Facilitators:

Nicolas Delvaux

Gillian Leng

Craig Lockwood

Other contributors:

Kelley T1, Kunnamo I1

1 ,

Rapid reviews to strengthen health policy and systems

The specific learning objectives are to:

1. Identify different rapid review methods that can be used in various contexts for health policy and systems research.
2. Discuss the usefulness of rapid reviews for providing actionable and relevant evidence to make informed decisions about health policy and systems in emergency, as well as routine contexts.
3. Describe how to develop a plan to conduct rapid reviews on health policy and systems research using the Rapid Review Practical Guide.

Description:

Welcome and Introductions (20 minutes): The session will start with welcoming remarks and an introduction to the Rapid Reviews to Strengthen Health Policy and Systems: A Practical Guide book, followed by a brief explanation from a policy maker on using rapid reviews to support health system decision making.

Presentations (65 minutes): This session will be broken into 3 different sections: 1) Rapid review methods, 2) Engaging knowledge users in rapid reviews, and 3) Building capacity and disseminating rapid reviews. Each of these sections will begin with recommendations from the lead authors of the Rapid Review Guide, followed by practical examples on how to apply these recommendations by representatives from three Alliance Review Centres established in low- and middle-income settings. Finally, participants will break into groups of 5-10 to discuss how the recommendations relate to their own HPSR rapid reviews. Facilitators will circulate the room to help people think through these plans.

Wrap-up (5 mins): The session will conclude with remarks from the lead facilitators.

Facilitators:

Andrea Tricco

Etienne Langlois

Sharon Straus

Valerie King

Sandy Oliver

Karen Daniels

Rhona Mijumbi-Deve

Sudhakar Morankar

Target audience:

Researchers and policy makers with a basic level of knowledge in knowledge synthesis

Type of session:

Presentations and group work.

Other contributors:

Cloete K1, El-Jardali F1, Akl E1, Anthony J1, M Ashoor H1, Courvoisier M1, Kelly S1, Odendaal W1, Pham B1

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Introducing Cochrane Global Mental Health: Improving the impact of Cochrane Mental Health in low- and middle-income countries

Objectives:

This session is intended as an introduction to Cochrane Global Mental Health and will provide an opportunity for participants to engage in our work.

Description:

The session will promote the activities of Cochrane Global Mental Health (Cochrane GMH). The current plans of GMH will be outlined, followed by questions, comments and suggestions from the floor. Using 'World Café' methodology We will seek early stakeholder input on priority topics from participants to help identify initial priorities for knowledge mobilisation activities, as well as identifying key topics for new or updated reviews. We also wish to identify potential partners and collaborators in Africa and other low- and middle-income countries.

Facilitators:

Corrado Barbui

Rachel Churchill

Target audience:

Users (policy makers, healthcare practitioners, healthcare consumers and the public) and producers (researchers and research funders) of mental health evidence syntheses based in LMICs. No specialist knowledge is required (basic).

Type of session:

This session will present the plans for Cochrane Global Mental Health, a newly formed collaboration between the five Cochrane Mental Health Groups and collaborators from low- and middle-income countries. Some preparatory work will be undertaken to provide participants with an overview of topics already covered by Cochrane Mental Health reviews, and we will use the opportunity to engage with participants about potential priorities for topics or resources for implementation using 'World Café' methodology.

How can the impacts of dissemination bias in qualitative research be detected in the context of qualitative evidence syntheses? Identifying new approaches

Objectives:

- To discuss how the impacts of dissemination bias in qualitative research might be detected in the context of qualitative evidence syntheses.
- To explore how approaches for detecting these impacts might be tested.

Description:

Dissemination bias (also called publication bias) in qualitative research – previously defined as "a systematic distortion of the phenomenon of interest due to selective dissemination of qualitative studies or the findings of qualitative studies" – has received little research attention. To date, we have limited knowledge on how dissemination bias might impact on qualitative evidence syntheses and on the assessment of confidence in synthesis findings. We also know little about how to detect the impacts of such dissemination bias. In this session, we will brainstorm approaches for doing this and discuss how these might be tested in the context of qualitative evidence syntheses.

Seminar structure:

- Input 1 (15 mins): Presentation of current 'state of the art' regarding dissemination bias in qualitative research and its relevance for qualitative evidence syntheses.
- Small group discussion 1 (20 mins): Participants brainstorm ways of detecting the impacts of dissemination bias in qualitative research.
- Plenary 1 (20 mins): Feedback on and discussion of the approaches discussed, including their feasibility in the context of qualitative evidence syntheses.

- Small group discussion 2 (15 mins): Participants discuss how approaches for detecting the impacts of dissemination bias might be tested in order to develop an empirical knowledge base in this field.
- Plenary 2 (20 mins): Feedback and discussion on potential further methodological work in this area.

Facilitators:

Simon Lewin

Heather Munthe-Kaas

Ingrid Toews

Jane Noyes

Joerg Meerpohl

Hector Pardo-Hernandez

Target audience:

Review authors; researchers working in the field of qualitative primary research and qualitative evidence synthesis; researchers with an interest in dissemination bias (publication bias).

Concurrent Session G

Refugee crisis in health and society

This session is linked to Plenary 3: EVIDENCE FOR EMERGING CRISES: How international collaboration and innovation can solve global humanitarian crises, such as Ebola

Description:

1-Coordination of health services for refugees: engaging stakeholders in the process

Presenter: Dr. Fadi El-Jardali

Brief description: This will presentation will start by a brief overview of the mechanisms and state of provision of health services to refugee in the setting of Lebanon. It will then describe the mechanism of engaging stakeholders in the evidence cycle: from priority setting exercise, to systematic reviews, to policy dialogue. It will end with a discussion of lessons learned.

2-The food and nutrition security status of Syrian refugees during the current protracted crisis

Presenter: Dr. Lamis Jomaa

Brief description: This presentation will address the impact of the current protracted Syrian crisis on the food security status of refugees and their host Lebanese communities, with a particular focus on vulnerable groups, primarily mothers and children. In addition, the presentation will include a discussion of the evidence-base needed to develop policy-level strategies and public health interventions that can address the needs of these vulnerable groups during such complex, protracted crises. Highlights from research studies and case examples will be provided to serve as lessons learned for similar humanitarian crises.

3-Building Responsive Health Systems to Help Communities Affected by Migration

Presenter: Dr. Kevin Pottie

Brief description: Health systems need to be responsive and adaptable to the needs of persons affected by migration. This presentation will review policy approaches that could improve health systems for populations affected by migration. It will particularly focus on the process of developing guidance on prevention and assessment of infectious diseases among newly arrived migrants to the European Union.

Facilitators:

Elie Akl

Lamis Jomaa

Fadi El-Jardali

Kevin Pottie

Objectives:

To understand the challenges of generating and using evidence to improve the lives of refugees and host communities, and how that evidence could contribute to future crises, in the setting of the Syrian conflict.

Surfing, drowning or wiped out by big data: Which way for evidence synthesis?

Data relevant to health are increasing - in volume, variety and velocity. These 'big' or 'diverse' data are also become more available and more usable, including individual participant data (IPD) from trials, data obtained from electronic medical records (EMRs), administrative data and associated data linkage systems; as well as '~omics' data (e.g. genomics, proteomics) and data from social networks, wearable and mobile devices.

Many argue that the increasing availability of these data will enable decision-making to draw increasingly on information that is closer to the circumstances of the individual. They predict that less value will be placed on summary measures or population estimates and greater emphasis on systems and data that describe smaller and smaller sub-groups approximating to each individual. Others are concerned about the unclear provenance of these data, risks of false positive findings, ability to assert causation and challenges in the transparency of data source.

This session will explore these issues with a series of presentations and a panel discussion. The presentation is relevant to all working in evidence synthesis (i.e. beyond health) and will highlight the importance to all in this field of engaging critically with debates around the use of diverse sources of data to inform decisions.

The five talks will be:

1. Reflections on data, inference and causality – Ida Sim
2. Using big data to learn about effects of interventions: holy grail or fool's gold? – Jonathan Sterne
3. Understanding prognosis in a world of diverse data – Karel Moons
4. Big Data and NICE – opportunities, challenges and threats – Gillian Leng

The facilitated panel discussion will give participants the opportunity to pose questions to the panel, as well as allow further discussion on wider challenges and practical ways forward.

Facilitators:

Julian Elliott

James Thomas

Ida Sim

Jonathan Sterne

Carl Moons

Gillian Leng

Target audience:

Researchers, systematic reviewers, guideline developers and policy makers Level: Intermediate (some previous knowledge of evidence synthesis beneficial)

Type of session:

Interactive with 5 talks and a panel discussion

Climate change in focus: Incorporating evidence synthesis methodology into environmental decision making

This session is linked to Plenary 3: EVIDENCE FOR EMERGING CRISES: How international collaboration and innovation can solve global humanitarian crises, such as Ebola

The Collaboration for Environmental Evidence, Johannesburg, invites researchers, decision makers, and practitioners who work in the environmental sector, and specifically those with an interest or remit to address issues related to climate change, to attend this session. Participants can expect to leave with practical suggestions about how to use evidence-synthesis methodologies in their daily decision making. More specifically, decision makers whose work requires showing what practical steps have been taken to consult with research evidence before making a decision regarding climate change would benefit greatly from this session. And environmental researchers concerned with how to use evidence synthesis methodologies to enhance the policy alignment of their work would benefit from the two practical presentations given, as well as the in-depth open-floor discussions that will follow.

Objectives:

Climate change represents one of the most pressing global crises for which evidence on policies and actions are urgently sought. The overall objective of this threaded session is for researchers and decision makers to leave with practical suggestions for how they can apply evidence-synthesis methods to help tackle this emerging crisis. The specific outcomes of this special session include providing participants with:

1. A better understanding of how evidence-synthesis methods (systematic reviews, systematic maps) can benefit climate change research; and,

2. Ideas about how policy needs regarding climate change may be anticipated and addressed through various evidence-synthesis methods.

Examples of questions discussed in each focus area include, but are not limited to:

- Pragmatically, how can interdisciplinary teams undertake syntheses in climate change research?
- How might we go about horizon scanning for pressing concerns relating to climate change that could be predicted in advance of the relevant policy window?

Description:

The overall structure of this session will involve a short welcoming address delivered by the session chair, followed by short presentations on two themes: how evidence synthesis methods (systematic reviews, systematic maps) can benefit climate change research, and how policy needs regarding climate change may be anticipated and addressed through various evidence synthesis methods. Each presentation will provide new and provoking content on these themes, including suggested strategies to address them. After each presentation, participants will break out into smaller groups that will develop points to support or challenge the presented suggestions. Participant discussions will be facilitated, and each discussion time will be wrapped up with a short report-back to the larger audience of the group's main learning points by a nominated member.

These shared learning points will be captured by the discussion facilitator and shared with the group after the session has ended. The session chair will close the session with a final summary.

Facilitators:

Ruth Stewart

Sif Johansson

Target audience:

Researchers, decision-makers, and practitioners who work in the environmental sector, and specifically those with an interest or remit to address issues related to climate change.

Other contributors:

Tannous N1, Haddaway N2

1 Africa Centre for Evidence and Collaboration for Environmental Evidence Johannesburg, South Africa

2 Swedish Environmental Institute, Sweden

Global ageing: Defining the evidence agenda. Towards 2020, the WHO decade of Healthy Ageing: A Cochrane-Campbell response

With life expectancy set to reach 90 in many countries we need to set agenda for producing, synthesising and disseminating evidence that will drive the research needed to address the healthcare, social needs and inequalities of an increasingly older population.

This special session will provide an opportunity for a multidisciplinary discussion to explore thoughts, opinions, share best practice, network and collaborate towards the aims above.

Prior to the session we will:

- Develop an evidence map of existing systematic reviews relevant to the scope of Global Ageing.
- Identify priorities for reviews by surveying policy makers, practitioners and advocacy organisations interested in healthy ageing (e.g. Better Ageing, International Longevity Centre, AgeUK).
- Commission and publish open-access social media pieces, e.g. short blogs, opinion pieces and showcase examples. We will actively solicit comments, discussions and contributions about these pieces on our social media platforms.

We will analyse all contributions prior to the session and generate appropriate themes for discussion which we will present as a starting point to ignite the discussion. Participants will then join a table for 15 minutes for a

themed discussion and then rotate to a second and third table to discuss different themes. Rapporteurs will summarise the discussion for each theme. The content and discussion of the entire session will be reported in real time via social media - text and images.

The outcome of the session will be:

- To define the scope of high-priority reviews that Cochrane and Campbell could jointly undertake.
- To develop position papers or editorials for submission to open-access journals.
- To identify priority strategies for knowledge translation, across the six themes of the Cochrane KT strategy.

Participants will be able to contribute to these outputs post session via Wiki and the Cochrane Global Ageing website and twitter discussions.

Facilitators:

Sue Marcus

Vivian Welch

Tracey Howe

Howard White

Target audience:

Stakeholders, review authors, policy makers, and consumers

Evidence matters: Examples of evidence-based decision making in humanitarian emergencies and how it can be improved

This session is linked to Plenary 3: EVIDENCE FOR EMERGING CRISES: How international collaboration and innovation can solve global humanitarian crises, such as Ebola

Target audience:

Those interested in an evidence-based approach to humanitarian action in disasters and other emergencies, including policy makers, international aid workers and researchers, and others who want to explore the challenges of evidence-based decision making in humanitarian crises. The session will be appropriate for people with any level of prior knowledge about the topic.

Objectives:

- Provide examples that highlight the use of evidence to inform decisions and choices in different humanitarian disasters and emergencies, demonstrating why evidence matters wherever the emergency is in the world.
- Show some of the challenges in interpreting evidence from a more routine setting when applying it to a disaster or other emergency.
- Discuss why some interventions are applied despite a lack of evidence.
- Raise the profile of the use of robust evidence in the humanitarian sector.
- Highlight barriers towards using evidence in the humanitarian sector.

- Showcase the development and role of Evidence Aid.
- Prepare a commentary about improving the use of evidence in the humanitarian sector for publication along with accompanying podcasts. (TBC)

Description:

Key topic:

Using storytelling to describe the use of evidence-based decision making in the humanitarian context, explain why some interventions are used despite a lack of evidence and discuss how evidence is interpreted differently in different contexts. The session will also consider how evidence-based decision making can be improved in the humanitarian sector.

The speakers will discuss relevant experience in three different emergencies (speakers TBC):

1. Indian Ocean Tsunami – Brief debriefing as an example of an ineffective intervention.
2. Brussels Terror Attack - Psychosocial first aid as an example of a lack of evidence.
3. Ebola or Cholera - an example of implanting evidence on effective interventions (TBC).

Structure:

- Introduction by the Chair (5 minutes).
- Evidence Aid presentation – how it started and where it is now, followed by general discussion (15 minutes).
- Three presentations, with discussion after each speaker (65 minutes).

Background:

With more than US$28 billion spent in 2015 on international humanitarian aid, the use of evidence is critical if funding is to be used effectively. Since Evidence Aid (www.evidenceaid.org) was established in December 2004 (as a Cochrane project, but now an independent charity registered in the UK), more than 1.6 billion people have been affected by disasters globally, with the estimated total cost of damages totalling over US$1.3 trillion for the period to 2013. However, despite this enormous burden and the real and pressing need to alleviate it, robust evidence of the effects of interventions in humanitarian response remains hard to find. More promisingly, though, recognition of the need for evidence-based decision making is increasing. By bringing together those who generate the necessary evidence with those who need and want to use it, Evidence Aid is grasping the opportunity to improve outcomes for billions of people. This session will highlight how the related challenges are being met and what needs to happen in the future if the humanitarian sector is to benefit from the lessons learned for evidence-based health and social care over recent decades.

Facilitators:

Claire Allen

Mike Clarke

Target audience:

Policy makers, international aid workers and researchers, and others who want to explore the challenges of evidence-based decision making in humanitarian crises.

Type of session:

The session will be chaired by Mike Clarke, with an introduction to Evidence Aid followed by three presentations to provide illustrative examples about the interventions used in specific emergencies in both low- and high-income countries. Audience discussion will take place after each presentation. The session will showcase the independent charity Evidence Aid and its continuing partnership with Cochrane, as well as other agencies and organisations. It will show how those involved in evaluating and implementing evidence about interventions can respond to the research needs of governments and NGOs when an emergency happens, the resources that are needed, how these can be used, and the work that remains to be done to provide the humanitarian sector with access to robust evidence. The audience will be asked to consider how they might become involved in supporting the work of Evidence Aid. A commentary will be prepared following the session for publication and the presentations will be recorded, with a view to preparing one or more audio podcasts.

Other contributors:

Jansen J1

1 Evidence Aid, UK

Concurrent Session H

Evidence-based education policy and practice: Sharing global experiences

Both researchers and policy makers will interested in this session. It will be one of the main education sessions at the Summit, so should attract all those with an interest in education. But it will be of interest to anyone with an interest in how evidence-based policy is working around the world.

The session will appeal to participants at all levels of knowledge.

Objectives:

This session will share global experiences of evidence-based policy and practice in education. Participants will learn how evidence is being generated and used in South Africa and the UK, as well as getting a global overview of the growth of rigorous impact evaluation in education.

Description:

The session will have three presentations:

- Evidence-based education in South Africa: This presentation will share developments in using evidence in policy making in the education sector and implications for systems, programmes and policy making in general. The presentation will focus on specific research projects as a basis for discussing institutional issues to do with the use of evidence in the sector in general.
- Generating rigorous evidence in the UK: There has been a huge growth in the use of randomised-controlled trials in the UK to inform education policy and practice. This presentation will discuss this experience from the earliest trials to the current situation of evidence-driven use of resources by schools, facilitated by the Education Endowment Foundation.
- The rise of education impact evaluation in low- and middle-income countries: This presentation will plot the rise of rigorous studies of education policy and programmes in developing countries, and key findings of what works and what doesn't from the evidence to date.

There will be a general Q&A for the audience.

Facilitators:

Howard White

Target audience:

Researchers and policy makers

Type of session:

This is an invited special session, for which the focus has been on obtaining high-profile, leading speakers who can talk about use of evidence in the education sector. There will be time allowed for Q&A.

Other contributors:

Nuga Deliwe C1, Connolly P2, Snilstveit B3

1 Department of Basic Education, South Africa

2 Queen's University Belfast, UK

3 International Initiative for Impact Evaluation, 3ie, UK

Separating fact from fiction: Enhancing critical thinking to equip the next generation for the post-truth society

This session is linked to Plenary 4: EVIDENCE IN A POST-TRUTH WORLD: The evidence, ethos and pathos. How scientists can engage, and influence the public, press and politicians

Important strides have been taken to get evidence-informed practices onto the agenda at international, regional, national and local levels. The post-truth world, defined by Oxford dictionary as "relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief", is opposite to the philosophy of evidence-informed practices. How will society cope? Part of the solution is critical and analytical thinking skills – starting with the youth. Enabling them to critically evaluate claims and practices. This session will showcase teaching and learning approaches to prepare the next generation to function in a post-truth society – to enable decisions informed by best evidence and not based on beliefs and practices of some.

Presentations:

- Learning critical reasoning - Susan van Schalkwyk.
- Effects of the Informed Health Choices primary school intervention on the ability of children in Uganda to assess the reliability of claims about treatment effects - Nelson Sewankambo.
- Teaching and learning of evidence-based practice at pre-service level - Kameshwar Prasad.

Facilitators:

Taryn Young

Allen Nsangi

Target audience:

Those involved in promoting evidence informed practice. Those involved in teaching and learning.

Type of session:

The session format will include short presentations and discussion.

Other contributors:

v Schalkwyk S1, Prasad K2

1 Stellenbosch University, South Africa

2 All India Institute of Medical Sciences,

Scientific journals and evidence: What does the future hold?

Objectives:

To challenge participants to consider what the ideal journal should be doing in 10 years' time to provide reliable and truly usable evidence to help them improve health.

Description:

- Introduction (5 minutes).
- Exercise 1 (10 minutes): Participants, in groups of 2-4 people, will discuss and list their four greatest frustrations with finding evidence they can actually use to inform their management of health problems.
- Feedback to full group from exercise 1 (5 minutes).
- Presentation (15 minutes): Trish Groves will explore how the future of evidence dissemination might look, and the possible role of journals, focusing on:
    - the need to tackle research waste and make published studies and data more relevant, useful, usable and reusable for clinicians, patients, service providers and policy makers.
    - who needs (or will pay for) journals if readers really only want bite-sized, free information at the point of care?
    - what types of research will readers want or need over the next decade?
        - how will they differentiate objective evidence from conflicted or fake news?
        - will 'big data' and evidence become more aligned?
        - where will 'real-world evidence' and evidence for precision medicine fit in?
    - Presentation (15 mins): Christine Laine will discuss how journals can handle living evidence. He will focus on:
        - living (continuously updated) and digital systematic reviews and guidelines
        - how the nature of evidence may change over the next decade
        - how journals can help make clinical practice guidelines more useful, reliable, trustworthy, timely, while reflecting clinical uncertainty
    - Exercise 2 (20 minutes): participants will break into groups of up to 8 people to answer these questions:
        - will journals that publish original research evidence be needed at all in 10 years?

- what are the two most important things that journals will have to do to remain relevant sources of 'evidence'?

- Feedback to full group from exercise 2 (10 minutes).
- Discussion and conclusions (10 minutes).

Facilitators:

Trish Groves

Christine Laine

Per Olav Vandvik

Target audience:

Clinicians, patients, and others needing usable, timely health research evidence. Basic and intermediate levels.

Concurrent Session I

Access to research results for decision making

This session is linked to Plenary 4: EVIDENCE IN A POST-TRUTH WORLD: The evidence, ethos and pathos. How scientists can engage, and influence the public, press and politicians

The current 2013 Declaration of Helsinki states that "Every research study involving human subjects must be registered in a publicly accessible database before recruitment of the first subject." and that "Researchers have a duty to make publicly available the results of their research .... Negative and inconclusive as well as positive results must be published or otherwise made publicly available". Poor allocation of resources for product development and financing of available interventions, and suboptimal regulatory and public health recommendations may occur where decisions are based on only a subset of all completed clinical trials.

At the global level, there is increased recognition that policy decisions on key health care interventions (e.g. essential medicines) can be distorted if informed by selectively disclosed findings. However the evaluation of all available evidence, irrespective of their nature, is hampered: often the location and examination of all existing evidence is unsuccessful as trial registration and public disclosure of results is far from universal.

WHO and 19 organizations issued a joint statement on public disclosure of clinical trial results in Q2 2017 but progress in policies and legislation remains patchy, with compelling evidence that many clinical trials go unreported, raising major concerns for evidence-assessment processes.

During this session the following questions will be explored:

- What steps can be taken by stakeholders in different areas to enforce universal clinical trial registration and timely public disclosure of methods and results?
- Can clinical trial transparency and accountability frameworks be extended into pre-clinical research and post-licensure implementation research?
- How can the value of registries be maximised for evidence assessment processes?

Elaine Beller, Bond University, Australia (15 minutes)

"Focus on sharing individual patient data distracts from other ways of improving trial transparency"

Vasee Moorthy, WHO, Geneva (15 minutes)

“No more excuses.” WHO’s vision and proposed actions to ensure registration and timely public disclosure of clinical trial summary results

Elizabeth Pienaar, PACTR, South Africa (15 minutes)

“Lessons learnt from PACTR for trials transparency in Africa”

Lisa Askie, Australia and New Zeland Clinical Trial Registry, Australia (15 minutes)

“Do we make best use of registries for evidence synthesis?”

(Discussion for 30 minutes, focused around the 3 questions)

Facilitators:

Vasee Moorthy

Elaine Beller

Lisa Askie

Elizabeth Pienaar

Type of session:

Presentations and discussion

Overcoming barriers to implementing an evidence-based approach in the humanitarian sector

Objectives:

Raise the profile of the use of robust evidence in the humanitarian sector. Highlight barriers towards using evidence in the humanitarian sector. Debate solutions to ensure greater use of evidence in the humanitarian sector. Publish a commentary about improving the use of evidence in the humanitarian sector, perhaps with accompanying podcasts.

Description:

Key topic to be addressed by speakers: What are the main barriers, and solutions to overcome them, when trying to ensure that the evidence base is used to save lives and improve health in humanitarian emergencies?

We will hear different perspectives outlining possible solutions in three sectors:

1. Academic research
2. Public health
3. Humanitarian action

Structure:

Three 15-minute presentations, with audience questions and discussion after each speaker, and a roundtable discussion at the end.

Background:

With more than US$28 billion spent in 2015 on international humanitarian aid, the use of evidence is critical if funding is to be used effectively. Since Evidence Aid (www.evidenceaid.org) was established in December 2004 (as a Cochrane project, but now an independent charity registered in the UK), 1.6 billion people have been affected by disasters globally, with the estimated total cost of damages totalling over US$1.3 trillion for the period to 2013. However, despite this enormous burden and the real and pressing need to alleviate it, robust evidence of the effects of interventions in humanitarian response remains hard to find. More promisingly, though, recognition of the need for evidence-based decision making is increasing. By bringing together those can generate the necessary evidence with those who need and want to use it, the opportunity to improve outcomes for billions of people is great.

Facilitators:

Claire Allen

Mike Clarke

Target audience:

Policy makers, researchers and others with an interest in the challenges of using evidence within the humanitarian sector. The session will be appropriate for any level of knowledge in the topic.

Type of session:

There will be three 15-minute presentations, with audience questions and discussion after each speaker, and a roundtable discussion at the end. Notes will be taken during the session in order to prepare a commentary on the event for publication. We will also record the presentations, with a view to preparing one or more audio podcasts.

Telling good stories: A workshop on the art of persuasion

This session is linked to Plenary 4: EVIDENCE IN A POST-TRUTH WORLD: The evidence, ethos and pathos. How scientists can engage, and influence the public, press and politicians

Objectives:

To explore how the principles of rhetoric and persuasion introduced in the plenary ‘Evidence in a Post-Truth World’ can be applied to specific cases.

Facilitators:

Trisha Greenhalgh

Target audience:

Anyone who needs to persuade anyone about evidence or a course of action.

Type of session:

Participants will work in small groups to develop persuasion strategies for lines of argument in controversial topic areas raised by themselves. They will present to other groups and discussion will be held on which techniques were helpful and what was learnt.

Involving people in society and healthcare

Objectives:

Participants will be able to:

- gain an overview of different approaches to PPI the wide range of health and social research and policy settings;
- contribute to the discussion of similarities and differences in approaches, exploring issues of language, culture, values, goals and other factors that affect the practice of PPI; and,
- help identify areas for future development and opportunities for collaboration.

Description:

Patient and public involvement and engagement in health and social care research, and guideline development, is an important global movement, adding value and legitimacy to research and knowledge transfer practice. It is well established in some areas of research, organisations and countries, and developing in many others.

The Global Evidence Summit offers an opportunity to bring together organisations and individuals active in health and social research, and guideline development to share approaches, learn from one another, critically examine our practice, and to identify ways of collaborating in the future to maximise our effectiveness.

1. Representatives of five key GES partner organisations will briefly present a structured response to key questions about their approach to involving patients and the public in their work. Written material will be provided ahead of the session (15 minutes).
2. The patient voice will be represented in a presentation about their experience of involvement (10 minutes).
3. Using a 'World Café' approach, facilitated discussion will take place around the following questions: (10 minutes per session, total 40 minutes).
    - Which values and goals may support successful PPI?
    - What does meaningful patient and public involvement in health and social research and guideline development look like?
    - What do organisations and individuals need to make meaningful involvement a reality?
    - How can organisations work together to broaden and deepen patient and public involvement?

Participants will be encouraged to share their experiences, learn from others, and identify practical actions, noting how we work in complex organisational environments, across the research cycle, and in global environment made up of different health and research approaches, diverse cultures, languages, incomes, technology and practice of patient and public involvement.

4. Plenary - World Café facilitators will briefly feedback three key points from their sessions.
5. Launch of the new International Network for Patient and Public Involvement and Engagement in Health and Social Care Research.

Facilitators:

Richard Morley

Target audience:

People with an interest in involving patients and the public in research and guideline development (PPI), including policy makers, consumers, researchers and others.

Other contributors:

Marshall C1, Schaeffer C2, White H3, Lytvyn L4

1 Cochrane,

2 Guidelines International Network,

3 Campbell Collaboration,

4 Magic,

Satellite events

Comprehensive systematic review training programme

Length of session:
The JBI Comprehensive Systematic Review Training Program (CSRTP) is a one, three or five-day programme depending on your research needs or areas of interest.

- Module 1: Introduction to evidence-based healthcare and the systematic review of evidence (Day 1).
- Module 2: Systematic review of quantitative evidence (Day 2 & 3).
- Module 3: Systematic review of evidence generated by qualitative research, narrative and text (Day 4 & 5).

Please note Module 1 is a prerequisite for Modules 2 and 3.

Description:
The Comprehensive Systematic Review Training Program is a one, three or five-day programme depending on your research needs or areas of interest.

Module 1: Introduction to e-based healthcare and the systematic review of evidence (Day 1)

Learn about evidence-based healthcare today, the importance of systematic reviews, creating systematic review protocols and key material regarding searching the literature.

Module 2: Systematic review of quantitative evidence (Day 2 & 3)

Learn about common research designs such as randomised-controlled trials, how to critically appraise research, identify important sources of bias in research, introduction to statistics in evidence-based healthcare, learn when and how to conduct meta-analysis.

Module 3: Systematic review of evidence generated by qualitative research, narrative and text (Day 4 & 5)

Learn about the importance of qualitative research in healthcare; common qualitative research designs such as phenomenology and ethnography; how to critically appraise qualitative research, identify different methods for synthesising qualitative research; and, learn when and how to perform a meta-aggregation or meta-synthesis of qualitative research.

Please note Module 1 is a prerequisite for Modules 2 and 3.

Facilitators:

Edoardo Aromataris

Zachary Munn

Other contributors:

McCulloch H[1]

[1] JBI, Australia

Target audience:

We invite researchers and clinicians to participate and learn how to develop a focused question, search for relevant literature, appraise and synthesise evidence arising from research.

Type of session:

This programme incorporates both theory and hands-on experience. During the programme participants will develop and complete a protocol.

Objectives:

Prepares researchers and clinicians to develop, conduct and report comprehensive systematic reviews in order to provide the strongest possible evidence to inform decision making or clinical guidelines in healthcare. This programme incorporates both theory and hands-on experience as you learn how to develop a focused question, search for relevant literature, appraise and synthesise evidence arising from research. By the end of the programme you will have a completed protocol and be ready to commence your review. Participants who successfully complete the programme can become Certified Reviewers, accredited for a period of two years as authors in the JBI Database of Systematic Reviews and Implementation Reports (JBISRIR), a refereed online journal, the content of which is indexed in Embase, Scopus, Mosby's Index (Elsevier), CINAHL (EBSCO) and MEDLINE.

Qualitative Evidence Synthesis Workshop (CLOSED SESSION)

- **THIS IS A CLOSED SESSION.**
- **Day 1: Overview of QES and formulating a review question**

On Day 1, we will provide participants with an overview of qualitative evidence syntheses, including key QES types and methods, discuss the recent emergence and current uses of QES in global health policy making, and discuss how to develop a review questions for a QES.

- **Day 2: QES search strategies, screening and inclusion, and assessing methodological limitations**

On Day 2, we will review search strategies, screening and inclusion processes, and methods for assessing methodological limitations. We will pay particular attention to the ways in which these steps in QES are both similar to, and contrast with, similar steps in quantitative reviews.

- **Day 3: Extracting and synthesising findings, and applying the CERQual approach to QES findings**

On Day 3, we will review methods for extracting data and synthesising findings in QES and will introduce participants to a new approach (CERQual) for systematically assessing the confidence in findings from a qualitative evidence synthesis.

The workshop is funded by the Alliance for Health Policy and Systems Research and therefore the participants will not have to pay any registration fee to attend. It will be hosted at a venue close to the Cape Town International Convention Centre.

The event is co-hosted by the South African Medical Research Council, the University of Cape Town, the Alliance for Health Policy and Systems Research, and the Global Evidence Synthesis Initiative.

Facilitators:

Willem Odendaal

Karen Daniels

Natalie Leon

Simon Lewin

Other contributors:

Colvin C[1], Swartz A[1]

[1] Division for Social and Behavioural Sciences, University of Cape Town, South Africa

Target audience:

Public health researchers, practitioners and decision makers who have a good understanding of evidence synthesis and/or qualitative research but who are new to qualitative evidence-synthesis methods.

Type of session:

3-day workshop

Objectives:

The workshop aims to achieve the following: 1. To introduce participants to the principles of conducting and interpreting qualitative evidence syntheses. 2. To provide participants the opportunity to use some of the tools and methods for synthesising qualitative evidence with real-life examples. 3. To introduce participants to CERQual, a method for assessing confidence in individual findings in qualitative evidence syntheses (very similar to the GRADE approach for quantitative reviews).

Developing GRADE guidance for overviews of systematic reviews

Target audience:
Researchers, policy makers and guideline developers with methodological expertise in overviews of reviews, GRADE methodology (or other systems for rating the quality of evidence), or guideline development. Those with methodological expertise in overviews of reviews, GRADE methodology (or other systems for rating the quality of evidence), or guideline development.

Description:
GRADE methods underpin some of the most important health policy decisions worldwide, providing a transparent system for rating the quality of evidence in systematic reviews. Despite the emergence of overviews (of systematic reviews) as a rapid synthesis method for evidence-informed decision making, there is no GRADE guidance for rating the quality of evidence in an overview.

This workshop forms Stage two of a project aiming to inform GRADE guidance for overviews. Stage one involved identifying approaches for assessing the quality of the evidence in an overview, through interviews with methodological experts and a systematic review of current practice. The final stage will involve surveying a panel of methodologists in order to refine and rate the importance of the domains and criteria identified in the first two stages.

At the workshop we will:

- Present findings from stages one and two for applying GRADE in overviews.
- Conduct small group work in which participants will be presented with scenarios intended to stimulate thinking about the complexities involved in applying GRADE in overviews.
- Facilitate small group discussion in which participants will be encouraged to critique proposed approaches for applying GRADE in overviews.
- Conclude with a round-up of proposals for applying GRADE in overviews.

Facilitators:

Sue Brennan

Joanne McKenzie

Philippa Middleton

Other contributors:

Akl E[1], Green S[2], Reid J[2], Lunny C[2]

[1] American University of Beirut, Lebanon
[2] Cochrane Australia, Australia

Type of session:

Workshop to critique and refine draft guidance of GRADE for overviews.

Objectives:

To engage methodological experts and end-users in development of GRADE for overviews.

A workshop on Rayyan: The ultimate web and mobile app for systematic reviews

Rayyan is a 100% FREE web application to help systematic review authors perform their job in a quick, easy and enjoyable fashion. Authors create systematic reviews, collaborate on them, maintain them over time and get suggestions for article inclusion.

This workshop targets current and potential Rayyan's users. These are people who are involved in the production of systematic and other types of reviews and are interested in using automation to help expedite their work. Rayyan is already being used by more that 6000 users (physicians, faculty, researchers, students, librarians, information specialists, project manager, etc.) from all over the world and growing. We expect many of the Summit attendees will be interested in Rayyan and learning more about it.

Enabling evidence-based healthcare depends on the availability of high-quality, up-to-date clinical resources. Disseminating these resources in a timely fashion requires efficient sharing, evaluation, and analysis of all relevant primary research and, ultimately, its distillation into systematic reviews. Rayyan aims to provide an end-to-end platform for automating the creation of systematic reviews, making the process faster and more accurate. Rayyan enables rapid citation screening via online contemporaneous sharing of decisions by reviewers, supported by a proven machine-learning algorithm, significantly reducing the time required to complete preliminary filtering of searches. It permits individualised labelling of reviewers' agreements/disagreements against inclusion criteria and provides real-time automatic suggestions for studies to be considered for inclusion using an eÿcient machine-learning algorithm. Risk-of-bias analysis and data extraction from full texts are additional features that are being planned. Participants will learn how to create reviews, upload multiple search results using different citation formats, invite collaborators, manage duplicates, use facets, e.g. word cloud, keywords for exclusion/inclusion, and authors, to navigate through the citations, exclude/include studies, understand Rayyan's suggestions, navigate the studies using the similarity graph, copy and export reviews, and upload full text PDFs. Attendees should bring laptops, tablets or smart phones.

Facilitators:

Hossam Hammady

Mourad Ouzzani

Target audience:

People who are involved in the production of systematic reviews and other types of reviews and are interested in using automation to help expedite their work.

Type of session:

Half-day workshop. (Light refreshments will be served at 8am and 10am and lunch at 12pm).

Objectives:

To provide an opportunity to experience the full customisability, ease of use and intuitiveness of Rayyan (http://rayyan.qcri.org) as well as to learn all the current and planned features of Rayyan. This in addition to collecting and discussing feedback from the Rayyan's community.

Future directions for Cochrane Information Specialists: The new Cochrane Review production ecosystem (CLOSED SESSION)

The life cycle of a Cochrane Review involves an increasing number of tools and systems, but it still relies on people. Cochrane information specialists are key contributors so in this workshop we aim to explore their role in the new Cochrane Review ecosystem. Information specialists serve a critical function in data curation, by performing curation tasks themselves, but also by informing the development of tools and workflows that facilitate these efforts. This all-day training event and discussion workshop will follow a set of records that enter this new ecosystem and are processed by both machines, the crowd and Information Specialists using a variety of tools.

Charting this course will provide an opportunity to learn about, discuss and contribute to the future development of the following projects and tools:

- Centralised Search Service
- Cochrane Crowd
- CRS Web (CRSW)
- RCT and other classifiers based on machine learning
- Linked Data PICO Annotator, QA Dashboard, Concept Browser, and Vocabulary Editor
- HarmoniSR standards
- And how the above interact with the larger ecosystem including Covidence, EPPI-Reviewer, RevMan Web and other tools

The interplay between these various tools and services presents an opportunity for efficiency gains in the management of study identification and description. The time-saving potential of the RCT classifier, links between CRSW and Cochrane Crowd which will facilitate screening on demand, and the ability to connect seamlessly with other review-production tools like Covidence and EPPI, can all improve our editorial processes. PICO annotation can enrich our datasets making them more useful for review production and evidence synthesis, as well as improving discoverability in our end-user products. Input from the Cochrane Information Specialist community is essential in ensuring that all these systems and tools work together optimally and support existing and emerging workflows. The day will include hands-on training with CRSW and the PICO Annotation tools, but it is also an opportunity for participants to reflect and provide new ideas on how these tools and the new workflows can support the work of Cochrane Information Specialists, and their groups, centres or fields, now and in the future.

Facilitators:

Ruth Foxlee

Deirdre Beecher

Gordon Dooley

Chris Mavergames

Anna Noel-Storr

James Thomas

Other contributors:

Cox S[1], Littlewood A[2], Salzwedel D[3]

[1] Cochrane ENT, UK
[2] Cochrane Oral Health, UK
[3] Cochrane Hypertension, Canada

Target audience:

Cochrane Information Specialists

Type of session:

Discussion & practical workshop

Evidence into policy into practice: Showcasing the global Practical Approach to Care Kit (PACK) programme

The PACK programme tackles health systems issues so that primary care practitioners can deliver evidence-based care that is policy aligned and feasible for their setting. Developed by the University of Cape Town Lung Institute's Knowledge Translation Unit (KTU), it is currently being implemented in collaboration with the BMJ and local role-players in the South African, Brazilian and Nigerian public-health systems.

The KTU in partnership with the Western Cape Department of Health invite you to a PACK Open Day at the KTU's home, the University of Cape Town Lung Institute in Mowbray, not far from the Summit venue. You will have the opportunity to attend presentations about the unit's guideline-development work and implementation research, view displays showcasing the programme's training and health-systems components, participate in PACK interactive training sessions and meet the developers, implementers and researchers of the programme – the KTU and BMJ teams, country localisers, policy makers and end-users.

For more information, view the KTU website and contact ktu@uct.ac.za

Facilitators:

Ruth Cornick

Target audience:

Primary care clinicians, trainers and health system managers, implementation scientists interested in implementing programmes which focus on application of evidence-based guidance and training programmes in low resource primary care settings.

Methods for systematic reviews of diagnostic test accuracy

Medical tests used in clinical practice should be safe and lead to improvements in health outcomes for patients. The best evidence comes from randomised-controlled trials (RCTs) comparing tests, including the effects of subsequent interventions on patients. However, such RCTs are rarely available. Therefore, healthcare

organisations and policy makers rely on information from studies that assess diagnostic accuracy, i.e. how well a test gets the diagnosis right in people who have the target condition and people who do not have the condition.

It is essential that valid methods are used to produce high-quality evidence reviews that will be used to inform recommendations for patient care. This workshop, organised by the Cochrane Screening and Diagnostic Tests Methods Group, is designed for researchers, policy makers and other stakeholders who have a keen interest in understanding key issues in the design and conduct of systematic reviews of diagnostic test accuracy (DTA). The workshop combines our series of workshops usually run throughout the Cochrane Colloquium into a coherent and effective one-day training programme.

The workshop will be delivered through a mixture of interactive presentations, discussions and small group exercises. Using a variety of clinical examples, participants will learn of key challenges and best practice for conducting DTA reviews, and how to make sense of the evidence from such reviews. Specifically, the workshop is based on guidelines as formulated in the *Cochrane Handbook for Diagnostic Test Accuracy Reviews*. Participants will be introduced to the process of question formulation for a DTA review; the methodology for quality assessment; the principles of meta-analysis and recommended statistical methods; potential sources of heterogeneity and methods for assessing heterogeneity; comparisons of test accuracy; presenting and interpreting results; and drawing conclusions.

Refreshments (lunch and two coffee breaks) will be provided.

Facilitators:

Yemisi Takwoingi

Jon Deeks

Mariska Leeflang

Hans Reitsma

Sue Mallett

Penny Whiting

Other contributors:

Macaskill P[1], Davenport C[1], Hyde C[1], Scholten R[2]

[1],
[2] Cochrane Netherlands, The Netherlands

Target audience:

Review authors, policymakers and other stakeholders interested in diagnostic test accuracy reviews.

Type of session:

Training workshop involving interactive presentations, discussions and small group exercises. The level is basic but knowledge of meta-analysis and meta-regression for intervention reviews will be an advantage.

Objectives:

To provide individuals interested in evidence-based diagnosis with an overview of concepts underpinning systematic reviews of diagnostic accuracy.

Living Systematic Review Network meeting and workshop (CLOSED SESSION)

This session will include a series of short presentations on the state of the science, followed by group discussion to further the thinking on several aspects of LSRs including methods, publication and more.

Please see the attached agenda.

Facilitators:

Melissa Murano

Julian Elliott

Tari Turner

Anneliese Synnot

Target audience:

This is a closed event for Living Systematic Review Network members only.

Type of session:

Closed meeting/workshop.

Capacity building to produce useful evidence: Who sets the agenda?

- Snacks and tea on arrival 13:30/14:00
- Coffee break with biscuits 15:30-16:00
- Close at 17:00

*No lunch is provided except for snack and sandwiches provided during registration and at the break.

The following organisations have accepted invitations to contribute to the session. Each contributor will be asked to share who sets their agendas with regards their capacity building for the production of useful evidence.

- **Africa Evidence Network and Africa Centre for Evidence:** Capacity building for evidence mapping and synthesis: Results of a new producer survey in Africa.
- **CLEAR-AA:** Listening to participant feedback: What have we learned; what are we doing about it?
- **3ie:** Avoiding donor-driven agenda setting.
- **JPAL Africa:** Building capacity using learning by doing and by mentoring partners.
- **Department for Planning, Monitoring and Evaluation in the South African government (DPME):** What producers need to learn from users about usefulness and how evidence is used.
- We are also inviting the Campbell Collaboration, Cochrane and GESI to participate.

Target audience:
3ie, the Africa Centre for Evidence, Africa Evidence Network, CLEAR-AA and J-PAL Africa invite interested producers and users to facilitate an open discussion about how we currently set capacity-building agendas for the production of useful evidence, what is working and what needs to change and why.

We welcome providers and recipients of individual-level capacity building, especially those with experience in determining needs in evidence production (evaluations and synthesis) and use. The audience will have some direct experience with and/or responsibility for capacity building and intermediate to advanced knowledge of capacity-building methods and design. Invited contributors will give short overviews that address agenda setting, needs assessment, and types of approaches. They will propose challenges to be discussed including: short courses and degree offerings, avoiding the either/or; what is important in assessing needs and why; teaching for quality useful evidence production, rather than projects; how to build on what works and change what doesn't. Participants will discuss what actions can help address challenges and gaps that can be their take-home messages.

Abstract:
While there have been notable investments in building research capacity in low- and middle-income countries, approaches to building capacity to produce evaluation evidence and evidence synthesis have been more sporadic. Furthermore the agendas for this capacity building are often donor-driven and implemented by research organisations with limited understanding of what constitutes useful evidence for decision making.

Do we need a revolution in thinking, methods and implementation with regards to how we design and implement capacity building for producers of evidence (3ie).

Invited speakers: Centre for Learning Evaluation And Results for Anglophone Africa (CLEAR-AA), 3ie, J-PAL, the Africa Evidence Network (AEN), the Africa Centre for Evidence (ACE), and the South African government's Department for Planning, Monitoring and Evaluation (DPME) will share their approaches for assessing capacity building needs.

A facilitated panel will probe the following questions:

- Who sets capacity building agendas and what impact does this have on the nature of the capacity building that is delivered?
- Is what we do evidence informed?
- Are our adult-learning pedagogies evidence-based and informed by knowledge of the evidence production and use contexts?
- How can partnerships between producers and users enable more useful capacity building?
- How can we be more responsive to known needs and current critiques from recipients and training providers?
- What is structural and what can we be part of improving: Revolution or reform?

In small groups, participants will share their experiences and reflections about what they know from experience just won't work (what makes them 'see red'), what is working and not, and what needs to change. The final part of the session will be dedicated to identifying lessons shared during the session and discussing ways forward for capacity building.

Facilitators:

Ruth Stewart

Beryl Leach

Target audience:

interested producers and users to facilitate an open discussion about how we currently set capacity-building agendas for the production of useful evidence, what is working and what needs to change and why?

Type of session:

After initial short presentations to frame the initial topic areas and main questions, organisers encourage all participants to reflect on them share their own experiences of receiving and delivering individual capacity building for the production of useful evidence. Facilitators will summarise the discussions and encourage participants to take the discussion forward once back home.

Objectives:

Our objectives are to: 1) Challenge our assumptions of how evidence capacity building agendas are set. 2) Share experiences from the diversity of capacity-building initiatives. 3) Engage participants about needs and how to meet them. 4) Reflect critically on how to improve and what to prioritise.

PRECIS-2: Precisely how can this tool help investigators design trials to achieve practical answers to 'real-world' questions?

Target audience:
Anybody in the trial team involved in designing randomisedcontrolled trials: people new to clinical trial design and those who are experienced. This includes primary investigators, trial managers, Statisticians, research nurses, doctors and therapists. The PRECIS-2 tool can be used as a way of talking to each other about testing an intervention through designing a pragmatic trial.

Learning objectives:
Explore what PRECIS-2 is and how it is being used through presentations and an interactive session in which participants try out the tool.

Designing clinical trials is challenging and there is a risk that trial-design decisions such as the choice of outcome, eligibility criteria or comparator could render the trial irrelevant to its intended users. The PRECIS-2 tool: Designing trials that are fit for purpose was published in the BMJ 2015 and describes a tool to help clinical trial designers think more carefully about the impact their design decisions have on the applicability of the trial results. The PRECIS-2 tool is being increasingly cited, is being used by the National Institute of Health (USA) to assess proposed trial designs, is named by the UK's National Institute of Health Research as one of eight 'useful papers' for trialists and is recommended by the Irish Health Review Board to support grant applications. The PRECIS-2 tool was developed and validated together with over 80 international trialists, clinicians and policy makers.

This interactive workshop will introduce the key design domains that need to be considered to ensure that a trial is relevant to those you hope will use its results. We will then describe how the tool can facilitate decision making and conversations among investigators and other stakeholders, and small group work will give workshop participants the opportunity for hands-on experience of applying the tool to a trial. Current projects using the PRECIS-2 tool will be used to illustrate different applications of PRECIS-2 and highlight how it can be applied to a wide range of trials. The workshop facilitators will lead an interactive discussion of how workshop participants could use the tool in their own trial design work, including how to handle challenges such as cluster designs and trials with multiple arms. The possible uses of the tool in future pragmatic and comparative effectiveness trial research will also be discussed.

This workshop will give participants a chance to expand their understanding of the different design considerations for pragmatic and explanatory trials, understand the consequences of design decisions on applicability as well as explore how the tool may be applied prospectively in designing trials. The structure of the workshop will be as follows:

- Pragmatic trials – Lara Fairall (10/20 mins).
- Introduction to the PRECIS-2 tool and the domains (Kirsty) – (30 mins) including work in pilot and feasibility trials and at the Primary Care Trials Unit (PCTU) London using PRECIS-2 in cluster randomisation at 2 levels/ multi-level trials.

Coffee break

- Group exercise
    - Introduce example. Brief explanation of what we are doing (10 mins).
    - Materials: Handouts with PRECIS-2 information sheet for everyone (BMJ table with all domains) plus information on our example trial.
    - Small group work: We will divide participants into small groups of around 6-8 people. Each group will be asked to prioritise 3 PRECIS-2 domains (e.g. Eligibility, and recruitment and setting) for the trial example and asked to look at other domains if they have time. All domains will therefore be covered by the workshop group without being rushed. Workshop facilitators will move between groups to help the discussion as needed (20 mins).
    - Feedback from each group – A representative of each group will feedback on how the group scored each domain: what they used to reach this score, difficulties they had, things they would like to discuss with facilitators and other participants, strengths and weaknesses of the tool. Other groups will be invited to comment (30 mins).
- Open discussion (30 mins) on the PRECIS-2 tool to close the workshop.
    - Discuss participants' experience and ideas for use of tool.
    - Final comments from the workshop facilitators.

This workshop is being hosted by the Knowledge Translation Unit, Cape Town Lung Institute. Refreshments are being sponsored by the South African Medical Research Council.

Facilitators:

Kirsty Loudon

Heidi Gardner

Simon Lewin

Other contributors:

Bhana A[1], Loveday M[1], Treweek S[2]

[1] MRC, South Africa
[2] , UK

Target audience:

Anybody in the trial team involved in designing randomised-controlled trials.

Type of session:

Proposed session talks, interactive group work, question and answer.