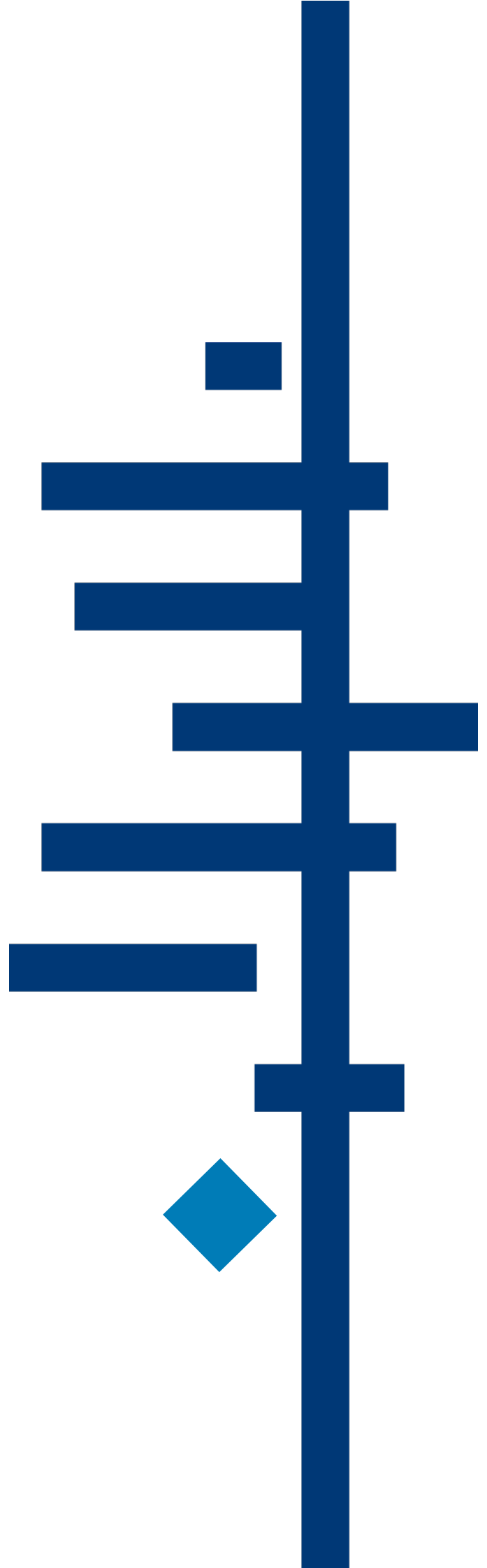


Cochrane Scientific Committee

MINUTES

21 June 2019
Teleconference



ATTENDEES

Karla Soares-Weiser (KSW) - Editor in Chief

Ella Fleming (EF) - Methods Implementation Coordinator

Toby Lasserson (TL) - Senior Editor (Methods Support and Development)

Scientific Committee members attending:

Donna Gilles (DG)

Editor for both the Cochrane Developmental, Psychosocial and Learning Problems Group and Diagnostic Test Accuracy Review Group, experienced mental health and disability researcher,

Julian Higgins (JH)

Professor of Evidence Synthesis at the Population Health Sciences, Bristol Medical School, at the University of Bristol, Bristol, UK, and current Senior Scientific Editor of the *Cochrane Handbook of Systematic Reviews for Interventions*.

Asbjørn Hróbjartsson (AH)

Professor of Evidence-Based Medicine and Clinical Research Methodology at the University of Southern Denmark, and Head of Research for the Center for Evidence-Based Medicine at Odense University Hospital, which hosts the secretariat of the Cochrane Bias Methods Group.

Ana Marušić (AM)

Professor of Anatomy and Chair of the Department of Research in Biomedicine and Health at the University of Split School of Medicine, Split, Croatia and founder of Cochrane Croatia.

Jane Noyes (JN)

Professor of Health and Social Services Research and Child Health, Bangor University, Wales, UK, lead Convenor of the Cochrane Qualitative and Implementation Methods Group, and a UK Cochrane Fellow.

Tomas Pantoja (TP)

Associate Professor, Family Medicine Department, School of Medicine, Pontificia Universidad Católica de Chile and Editor of the Cochrane Effective Practice and Organisation of Care (EPOC) Group.

Philippe Ravaud (PR)

Professor of Epidemiology, Faculty of Medicine, Head of the Clinical Epidemiology Centre, Hôtel-Dieu Hospital, Paris Descartes University, France and Director of Cochrane France.

Rebecca Ryan (RR)

Research Fellow at the School of Psychology and Public Health, La Trobe University, Australia and Joint Co-ordinating Editor of the Cochrane Consumers and Communication Group.

Christopher Schmid (CS)

Professor of Biostatistics, founding member and Co-Director of the Center for Evidence Synthesis in Health, Brown School of Public Health, US, Fellow of the American Statistical Association (ASA) and Founding Co-Editor of *Research Synthesis Methods*.

Nichole Taske (NT)

Associate Director (Methods & Economics), Centre for Guidelines, National Institute for Health and Care Excellence.

Methodological Editor, Cochrane Lung Cancer Group., UK

Scientific Committee members' apologies:

Corinna Dressler (CD)

Deputy Head, Research Associate at the Division of Evidence-Based Medicine (dEBM) at the Charité – Universitätsmedizin Berlin, Germany

Johannes Reitsma (JR)

Associate Professor at the Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, The Netherlands and a member of both the Cochrane Diagnostic Test Accuracy Working Group and the Screening and Diagnostic Tests Methods Group.

Nicole Skoetz (NS)

Scientific Co-ordinator, Working Group Standard Operating Procedures of the Comprehensive Cancer Centers, Center of Integrative Oncology Köln Bonn, and Co-ordinating Editor Cochrane Haematological Malignancies Group, Department of Internal Medicine, University Hospital of Cologne.

Minutes

Chairs of the Scientific Committee: Ana Marušić and Philippe Ravaud

21 June 2019, 12.45pm BST/13.45pm CEST/07.45am EDT/21.45pm AEST (1 hour)

Meeting Chair: Philippe Ravaud

Abbreviations:

TOR: Terms of Reference

ECR: Early-career researcher

RoB 2: Risk of Bias 2 tool

CSR: Clinical Study Report

CRG: Cochrane Review Group

LSR: Living Systematic Review

NMA: Network meta-analysis

CRSU: Complex Reviews Support Unit

Agenda item	Details and links to documents or appendix
1) Welcome and apologies received	Welcome Karla Soares-Weiser, new Editor in Chief of Cochrane Library.
2) Approval of previous minutes	<u>Approval of the minutes dated 31 March 2019 – see Paper 1.</u> Minutes approved with no further edits. ACTION SCIENTIFIC COMMITTEE: All to update their affiliations within the minutes from this meeting (see page 2) and confirm if there are any updates required for their biography on the Cochrane Methods website: https://methods.cochrane.org/scientific-committee/cochrane-scientific-committee-members
3) Scientific Committee business matters	<u>Scientific Committee members' tenure – see Appendix 1 and Paper 2.</u> Discussed who falls under the remit of 'external members for independent balance'.

TOR states that those who are internal are “members from within the Cochrane community who either have a strong focus on methods research and development, or editorial skills and healthcare experience with strong methods interests.” Internal would include Methods Groups, Methods Executive or other long-standing methods-related roles with Cochrane. All others would be external. Once the Scientific Committee has assessed who fills what role within the Scientific Committee, we can identify gaps and recruit strategically, e.g. do we need more external representatives?

ACTION SCIENTIFIC COMMITTEE: Confirm with EF if you feel you are internal or external to Cochrane, based on the TOR, and highlight if you are from the Cochrane methods community, other Cochrane communities and/or have specific stakeholder expertise (i.e. consumers, guidelines)

Discussed the tenure of the Scientific Committee – first meeting was in May 2017 but has taken a while to confirm processes and remit. First in-person meeting was in March 2019. Discussed that because of this, anyone who wants to remain in role for the additional two years should be approved to (TOR states that no member should stay on the Committee for more than five years).

ACTION SCIENTIFIC COMMITTEE: Confirm with EF if you want to step down from the Scientific Committee in May 2020 or if you want to remain in the role for an additional two years

Discussed that we do not currently have an ECR on the Committee. Methods Executive will be inviting ECRs to present in the Methods Group Convenor Meeting in Santiago so we can consider the shortlist for the ECR Scientific Committee position too.

ACTION EF: Liaise between the Methods Executive and Scientific Committee about the shortlist of ECR methodologists

Recent project updates from the Content Strategy, inc. RoB 2, clinical study report use, prognosis reviews, rapid reviews, living reviews, network meta-analysis, and equity.

RoB 2: First review group in the implementation pilot underway and setting up calls with others; finalising a ‘starter pack’ for the pilot groups and will then contact Network Senior Editors about other review groups that might be interested in joining the pilot; ongoing discussions with RevMan Web, Cochrane Library, GRADE Pro and Training (including feedback from RoB 2 strategic session in Krakow); RoB 2 training event for CRGs in Bristol, UK (10-12 July 2019) has approximately 50 attendees from across CRGs.

CSRs: Held a consultation meeting on 16 May 2019; Methods News post on the meeting, minutes and next steps for the project can be found here: <https://methods.cochrane.org/news/using-clinical-study-reports-data-source-cochrane-reviews-consultation-meeting-report-and-next>).

Prognosis reviews: 12 CRG representatives attending Prognosis Review Training, Utrecht, Netherlands (1-3 July 2019) & one in Sydney (July 2019).

Rapid reviews: Project to collate rapid review definitions ongoing and research projects nearing completion; consultation survey to rank priorities for Cochrane rapid reviews to be developed; consultation meeting to develop a working definition for a ‘Cochrane Rapid Review’, tentatively to be held in Santiago; proposal for consideration in Cochrane should be ready by the 2020 mid-year Governance Meetings.

LSRs: preparing to submit the results of their pilot evaluation (report also available here: https://community.cochrane.org/sites/default/files/uploads/inline-files/Transform/201905%20LSR_pilot_evaluation_report.pdf); developing their guidance for LSR based on feedback from the pilot; supporting funding applications for new LSR and continue to support ongoing LSRs; supporting webinars and training (e.g. at Colloquium); key challenges to address include building activity within the Living Evidence Network (approx. 250 members) and issues with versioning and publications.

NMA: Agreement for the development of CINEMA; projects looking to build expertise capacity within Networks/CRGs and develop methodological standards are underway.

Equity: developing a Cochrane Interactive Learning Module.

Actions carried over from last meeting:

ACTION DT: Follow up with CENTRAL to see what plans, if any, there are to host aggregate data to facilitate NMAs and LSRs in Cochrane - update from EF, spoke to Ruth Foxlee and she confirmed that if you are referring to aggregate data extracted from the trial then the answer is no, and there are no immediate plans to do this either.

ACTION EF: Check whether it's possible for the RCT Classifier to be used by those not associated with Cochrane – in development.

New methods submission process and website

Update from EF - following discussions at the last Methods Executive and Scientific Committee meetings, EF is developing a first draft for the proposed updates. This will be circulated to the Methods Executive and Scientific Committee soon.

Highlighted that we should include questions that ask people 'how close to complete are the methods' – is the method a horizon scanning new method (that could be used in a pilot) or is the method 'ready to use' (for implementation considerations)? Need to make the distinction clear on the difference between a submissions of a tool, process, method or new review type, and who makes the decisions about each in Cochrane.

Highlighted the need to clarify the process for new methods submissions so that we can begin promoting. Would be useful to have as a standing item on some of the Cochrane mailings, e.g. Cochrane Connect, Digests, that states "submit by XX and the Methods Exec/Scientific Committee will consider in their meeting on XX".

ACTION EF: Update the new methods submission process and website proposal based on the discussions from the meeting, and share it with the Scientific Committee and Methods Executive as soon as it is ready

4) New submission(s) for Scientific Committee Review

No further submissions.

5) Updates on methods undergoing Scientific Committee Review

See submission in **Appendix 2: Use of interactive analysis framework to facilitate diagnostic test accuracy and network meta-analyses analyses**

Update JH following Methods Executive assessment (feedback from the Comparing Multiple Interventions Methods Group and Diagnostic and Screening and Diagnostic Tests Methods Group). JH has contacted Alex Sutton, provided feedback following the Methods Group assessment and asked what sort of outcome they are hoping we might arrive at - Are you looking for approval that it's acceptable to use? Formal endorsement? Mention on a web site? Funding? Mandatory use by Cochrane authors? JH said that to Alex Sutton "broadly the opinion seems to be that the methods underlying the tools are uncontroversial. Certainly we are keen to see user-friendly software for implementing established methods made available to our review authors. Concerns have been expressed in three areas, which I imagine are very familiar to you: first, that the range of methods implemented is a bit limited (in particular, no comparisons of tests or investigation of heterogeneity?); second, that the ease of use runs the risk that naïve users will make big blunders; and third, that there would need to be very straightforward and user-friendly instructions/guidance for using the tools for our novice authors."

KSW highlighted that the CRSU is concerned that they are in the last year of funding and so they want to deliver training on the tool. Confirmed that we need confirmation from the Scientific Committee that the methods behind the tool are sound. Committee highlighted that as long as the tool is used within its limitations, and that these are made clear, there should be no issue. However, decisions on training and implementation sit with the Editorial Board, not Scientific Committee. KSW and TL highlighted that it is likely the CRSU will organise a webinar on the tool.

6) Methods for Scientific Committee sign-off or recommendation

No methods for sign-off or recommendations.

7) New methodological innovations for Cochrane's agenda?

Discussion on considerations for future submissions (horizon scanning) – no one had any recommendations at this point. Highlighted the need to confirm the process and ensure people are aware of it (for reactive submissions) and also horizon scan as a Committee to request/facilitate submissions (for proactive submissions).

ACTION ALL: Consider methodological innovations or developments where a proponent could be contacted by EF to facilitate some methods submissions for future discussion

The following methods or tools were highlighted in previous meetings and could be considered for future submissions:

- Risk of Bias due to Missing Evidence (RoBME)
- Tool for Addressing Conflict of Interests in Trials (TACIT)
- (Semi) automation methods
- Standalone qualitative evidence synthesis (following PHHSN two-year pilot)
- Use of IPD in repositories and other types of data
- Intervention Complexity Assessment tool.
- Methods for prognosis reviews.
- Methods for addressing missing participant data.
- Assessing the quality of evidence and presenting the results of non-randomised intervention studies (recommended by NS).
- Evaluation and validation of the RCT classifier.
- Meta-analyses of prevalence and risk, and consider resubmitting (DG)

Appendix 3 includes the Scientific Committee history for methods and tools.

Any unanswered methodological review questions can be flagged to Mike Clarke and the Methodology Review Group to consider it for a future review.

8) Meeting schedule

List of upcoming meetings:

30 September 2019, 12.00pm BST/ 13.00pm CEST/ 07.00am EDT/ 21.00pm AEST (1.5 hours) – teleconference scheduled.

23 October 2019, 13:00 to 13:45 (Santiago local time) – in-person meeting at the 2019 Colloquium confirmed.

January 2020 – teleconference to be organised.

March/April 2020 – in-person meeting at the mid-year Governance Meetings?

Discussed the importance of in-person meetings and all in favour of another in-person meeting in 2020 at the mid-year Governance Meetings. Also highlighted the need to have overlap with the Methods Executive, e.g. Scientific Committee Chairs to attend part of the Methods Executive. PR highlighted the previously discussed idea of an annual joint horizon-scanning paper from the Methods Executive and Scientific Committee on evidence synthesis methods. This could be used to help prioritise methods to request submissions on for future consideration.

ACTION EF: Investigate options for funding for the Scientific Committee members to attend the mid-year governance meetings for an in-person Scientific Committee meeting

ACTION EF: Discussed with KSW the idea of an annual joint horizon-scanning paper from the Methods Executive and Scientific Committee on evidence synthesis methods

9) Any other business

Highlighted the 2019 Methods Symposium topic - Developing robust review protocols in an increasingly complex world:
<https://colloquium2019.cochrane.org/pre-colloquium-satellites-and-meetings>

Monday 21 October 2019, 14:00-17:00, CasaPiedra, Santiago, Chile (on the pre-Colloquium day)

Cochrane reviews are becoming increasingly complex as methods evolve, as data sources become more diverse, and as we increasingly recognize that health outcomes are the products of many interlinked elements. Cochrane pioneered the publication of protocols before undertaking systematic reviews, partly to help ensure that the many decisions we make along the way are objective and not based on the results of the identified studies.

This year's Methods Symposium will examine whether our protocols continue to provide the road map we need to navigate a modern Cochrane review. We will explore how much can reasonably be anticipated about the decisions we need to make. Speakers will address several aspects of pre-specification from diverse methodological perspectives, showcasing updated material in the new Cochrane Handbook for Systematic Reviews of Interventions (Version 6). Issues for discussion include deciding what syntheses are to be performed, deciding which data to extract and analyse, setting up review-specific considerations for assessing risk of bias, and dealing with issues of complexity in interventions and study contexts. We will discuss the extent to which issues can be overcome with careful review planning, and aim to determine whether refinements are needed in our current guidance for writing protocols.

There is no fee for attending this event. All are welcome, but attendees must register and spaces are limited.

APPENDIX 1 - Scientific Committee members tenure

Relevant notes from the Cochrane Scientific Committee (CSC) Terms of Reference (full document [here](#)):

- CSC consists of up-to 15 members:
- Editor in Chief sits on the CSC as a non-voting member.
- The Methods Implementation Coordinator will support the activities of the CSC, and is not a member and does not have voting rights.
- CSC needs a quorum of 10 members (excluding the Editor in Chief) for decisions (inc. at least one co-Chair).
- Selection will consider geographical location, gender and language diversity and any other considerations of equity.
- The CSC will take responsibility for the selection of members following a process of open nomination for suitable candidates.
- The CSC will select two Co-Chairs from amongst its membership.
- Terms of office are initially for three years, extended on request for a further two years at the Co- Chair's discretion.
- No member should serve for more than 5 years. Co-chairs should change every two years.
- Staggered membership at CSC inception will ensure continuity throughout the CSC life cycle.
- Composition of the CSC membership:
 - o Six to eight members from within the Cochrane community who either have a strong focus on methods research and development, or editorial skills and healthcare experience with strong methods interests. Evidence of a longstanding leading role in Cochrane is an additional requirement. However, the selected member does not represent any entity in Cochrane.
 - o Four to six external members for independent balance. These people are senior experienced research leaders within their specialist field, who have a wide knowledge of systematic review methodology, or senior experienced systematic reviewers or editors with a known interest and experience in methodological development. At least two of the external members will also represent stakeholders and end users of reviews e.g. agencies using Cochrane Reviews in guidelines, health research funders and those representing consumer interests.
 - o The Editor in Chief (or Deputy Editor in Chief).
 - o An early career researcher who is also within 5 years of completing a PhD, developing a relevant methodological track record.

Who's in which role?

Confirming who is in each role (this information is based on member information in the attendees list):

- Six to eight members from within the Cochrane community (**eight**) = Donna Gilles (CRG Editor), Julian Higgins (Editorial Board, Methods Executive, Methods Group Convenor, Handbook Editor), Asbjørn Hróbjartsson (Methods Group Convenor), Ana Marušić (Cochrane Centre), Jane Noyes (Methods Executive, Methods Group Convenor), Tomas Pantoja (Cochrane Centre, CRG Editor), Johannes Reitsma (Methods Group Convenor), Nicole Skoetz (Network Senior Editor, Editorial Board).

OPEN ACCESS

- Four to six external members for independent balance (five, inc. Cochrane Consumers and guideline representative) - Philippe Ravaud, Rebecca Ryan (Cochrane Consumers), Christopher Schmid, Nichole Taske (guideline representative), Corinna Dressler.
- The Editor in Chief - Karla Soares-Weiser (one).
- An early career researcher – None at present.

APPENDIX 2 – New methods submission(s)

SHORT TITLE OF METHOD OR METHODS RELATED DEVELOPMENT

Use of interactive analysis framework to facilitate diagnostic test accuracy and network meta-analyses analyses

Name: Alex Sutton

Email: ajs22@le.ac.uk

Contact details: Department of Health Sciences, College of Life Sciences, University of Leicester, George Davies Centre, University Road, LEICESTER LE1 7RH UK

Telephone: + 441162297268

Cochrane Affiliation: methods group, bias group, non-randomised group, dementia & cognitive impairment, accident prevention

Lead researchers or developers

Several people from the Complex Review Support Unit (<http://www.nihrcrsu.org/>) and beyond

A comprehensive list can be supplied later if necessary.

Aims and Objectives

To develop interactive software to facilitate meta-analysis which otherwise requires specialist software routines which are difficult to use by non-statistical experts. Also, to provide a powerful interface so even statisticians will want to use the software for its power, speed, flexibility and ease of use.

This software has been developed, in part, as part of work with the NIHR Complex Review Support Unit which supports UK based Cochrane authors. Experiences through this unit indicated software was a major barrier for Cochrane reviewers to use the most relevant analysis methods for diagnostic test accuracy and network meta-analyses. This software aims to remove that barrier, and initial feedback suggests it is being successfully used by pilot groups.

Key features

- Point and click interface, removing barrier to entry for non-statistical experts for specialist network meta-analysis and diagnostic test accuracy analysis types. Both of which are not available in Cochrane software.
- Runs in a web browser minimising compatibility problems.
- Underpinned by analysis routines developed in R (by others) ensuring accuracy of results.
- Emphasis given to visual output formats that are clinically relevant

- Some graphics - like the displaying of study quality on an ROC plane - are novel and not available in other software
- All output can be exported and imported into Cochrane Reviews.
- We are open to suggestions for improvements and new features to add to the software
- Individual studies can be excluded in seconds facilitating sensitivity analysis.
- It would be very possible, with amendments to the software, to use the interface to view the data in published Cochrane reviews allowing authors to carry out their own critique of the analysis / conduct alternative analyses and produce alternative views of the data not included in the original review.

Key publication or guidance document

We have 2 peer reviewed papers re-submitted post revisions and are hoping these will be accepted and published shortly (at which point they will be open access):

The apps (which are free to use and under active development) are available at:

https://crsu.shinyapps.io/dta_ma/

<https://crsu.shinyapps.io/metainsightc/>

APPENDIX 3 - Methods decisions by the Scientific Committee (2017-2019):

18 May 2017

1. **ROB 2.0 = Highly recommended** - *the recommendation is that it is mandatory for new reviews when officially launched. For updates, it is not reasonable to re-do previously included studies and a strategy is required to handle these situations.*
Now included in the Content Strategy and a priority project for 2019 to assess the feasibility of implementation.
2. **ROBINS-I = Recommended with provisions** - *the ROBINS-I tool is recommended as the preferred tool for new reviews. It is not mandatory. The importance of competency to use the tool will be highlighted in guidance.*
Recommended but unsure of implementation or evaluation. Will need to discuss with developers.
3. **Cumulative meta-analysis = Further evaluation required** - *the CSC agreed that further technical examination of the key approaches was required to ascertain whether there is a preferred method, or whether the methods provide value to managing random error and are needed at all, or only in certain scenarios. An expert panel will be asked to consider the work completed by colleagues to date and will report to a future CSC.*
See points relating to whether using sequential methods to adjust P values is necessary in repeated meta-analyses for decision.

18 October 2017

1. **Inclusion of results from searching study registries in Cochrane reviews: completed but not published studies** = *Not a matter for the CSC but further guidance needs developing.*
2. **Meta-analyses of prevalence and risk** = *This is not currently matter for the CSC and will be considered further in Cochrane's Content Strategy.*

3. **Meta-regression** = *This is a matter for the Editorial Board (possibly Governing Board if it impacts on budgets). This is not a matter for the CSC.*
4. **Timely and Reliable Evaluation of the Effects of Interventions: A Framework for Adaptive Meta-analysis (FAME)** = *this was to be incorporated into the Handbook and not a matter for the CSC.*
5. **Determining when meta-analyses of published time-to-event outcomes reliable enough to form robust clinical conclusions. An evidence-based approach** = *this was to be incorporated into the Handbook and not a matter for the CSC.*
6. **Data-based predictive distributions for between-study heterogeneity** = *CSC not able to make a decision and requested paper and presentation for future meeting.*
Decision below.

28 February 2018

1. **Interim guidance on how to decide whether to include clinical study reports and other regulatory documents into Cochrane Reviews = Optional/advisory** - *CSC members agreed this data was important in tackling reporting bias. Further development of methods and tools were required that identifies where more evidence is needed as well as where Cochrane should concentrate its energies. The report's findings were accepted in principle by the committee. However, further consideration of roll out and implementation within the main body of Cochrane required the input of both Governing Board (resources) and Editorial Board (implementation requirements).*
Now included in the Content Strategy and a priority project for 20119 to assess the feasibility of implementation.
2. **Expert panel report on whether using sequential methods to adjust P values is necessary in repeated meta-analyses = Not recommended** - *The CSC concur with the panel's recommendation that these methods should not be used routinely in Cochrane and that only in specifically justified cases is it reasonable to do so.*
Statement posted on Methods Website. No further action.

5 June 2018

1. **Data-based predictive distributions for between-study heterogeneity = Optional/advisory** - *The Committee recommends that Cochrane Reviewers are encouraged to add Bayesian meta-analysis alongside the traditional techniques included in RevMan to supplement and improve their review. Particularly where there is a very high or low heterogeneity estimate therefore, in these situations an additional Bayesian analysis will have the greatest impact. This will be included in the new updated Handbook chapter.*
Statement posted on Methods Website. No further action.

8 November 2018

1. **Qualitative evidence synthesis as a standalone review = Decision not made by CSC** – *Editorial Board approved a two-year pilot and following the pilot the CSC and Methods Executive would make a decision on whether standalone QES would be endorsed in Cochrane.*
2. **Prognosis reviews as standalone review = Decision not made by CSC.**
Now a formal review type in the Cochrane Library and Prognosis Methods Group have been overseeing the development and implementation.

31 March 2019

1. **Use of interactive analysis framework to facilitate diagnostic test accuracy and network meta-analyses analyses** (under evaluation)

21 June 2019

1. **Use of interactive analysis framework to facilitate diagnostic test accuracy and network meta-analyses analyses** (under evaluation)