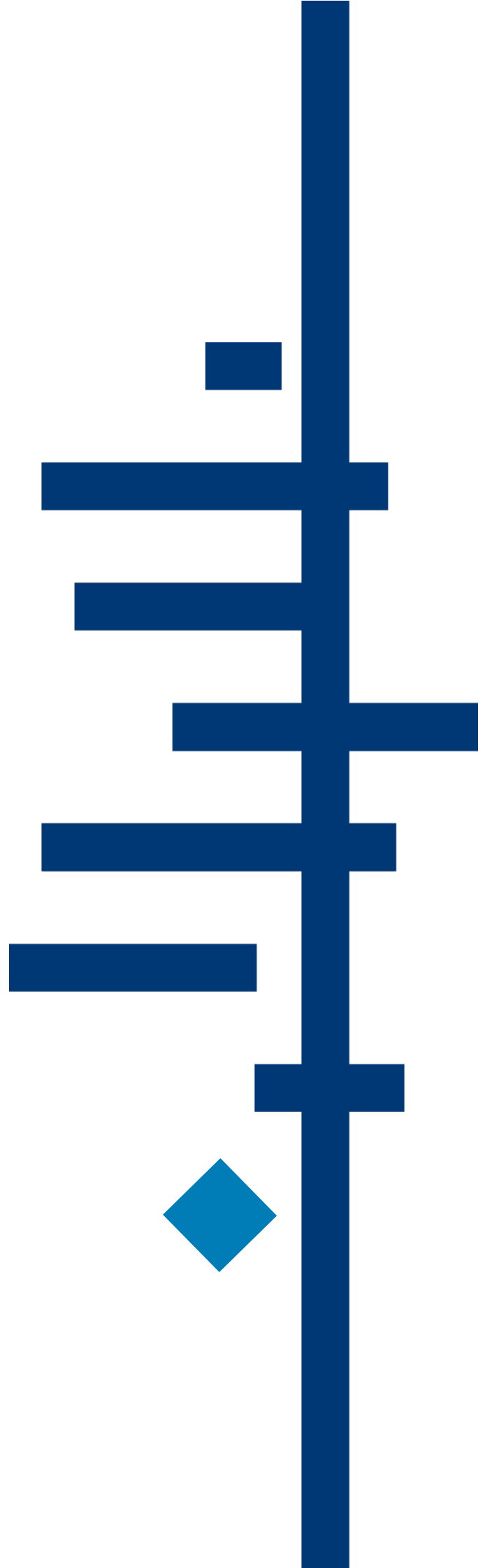# Cochrane Scientific Committee

AGENDA

21 June 2019
Teleconference

ATTENDESS

Karla Soares-Weiser (KSW) - Editor in Chief
Ella Flemyng (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.
Julian Higgins (JH)
Professor of Evidence Synthesis at the School of Social and Community Medicine, 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 (Methodology), Centre for Guidelines, NICE, UK

Scientific Committee members' apologies:

Corinna Dressler (CD)
Research Associate at the Division of Evidence-Based Medicine (dEBM) at the Charité – Universitätsmedizin Berlin, Germany
Johannes Reistma (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.

AGENDA

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 15 minutes)

Agenda item	Details and links to documents or appendix
1) **Welcome and apologies received**	
2) **Approval of previous minutes**	Approval of the minutes dated 31 March 2019 – see **Paper 1**. Request for everyone to update their affiliation details within the minutes from this meeting.
3) **Scientific Committee business matters**	3a) Scientific Committee members' tenure – see **Appendix 1** and **Paper 2.** All to confirm who fills which role within the Scientific Committee. Ask Scientific Committee members to begin considering if they want to step down in 2020 or if they would like to remain in the position for an extended time (we require some continuation of knowledge and experience with members remaining). **ACTION ALL: Confirm with the Co-Chairs and EF if you would like to remain on the Scientific Committee or step down in 2020, by 19 July 2019.**
	3b) 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. Updates from EF.
	3c) New methods submission process and website updates Update from EF.
4) **New submission(s) for Scientific Committee Review**	No further submissions.

5)	**Updates on methods undergoing Scientific Committee Review**	See submission in **Appendix 2:** <u>Use of interactive analysis framework to facilitate diagnostic test accuracy and network meta-analyses analyses</u> Update from EF and JH following Methods Executive assessment of Methods Group feedback (from the Comparing Multiple Interventions Methods Group and Diagnostic and Screening and Diagnostic Tests Methods Group).
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 and considerations for future submissions. Could we prioritise one or two and request submissions for discussion at the next meeting? The following methods or tools have been previously highlighted for consideration: - 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) - Meta-analyses of prevalence and risk, and consider resubmitting (via DG) - Use of IPD in repositories and other types of data - Intervention Complexity Assessment tool - Methods for addressing missing participant data. - Assessing the quality of evidence and presenting the results of Non-randomised Studies in Cochrane Reviews. - Evaluation and validation of the RCT classifier. - Prognosis methods. **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**	<u>List of upcoming meetings:</u> Teleconference - Monday 30 September, 12.00pm BST/13.00pm CEST/07.00am EDT/21.00pm AEST (one hour 30 minutes) Cochrane Colloquium 2019 – October to be confirmed. Teleconference – January to be confirmed. Cochrane mid-year Governance Meetings 2020 – March/April to be confirmed.
9)	**Any other business**	

APPENDIX 1 - Scientific Committee members tenure

Relevant notes from the Cochrane Scientific Committee (CSC) Terms of Reference on member tenure (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:
   - 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.
   - 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.
   - The Editor in Chief (or Deputy Editor in Chief).
   - 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 has been included by EF 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 Reistma (Methods Group Convenor), Nicole Skoetz (Network Senior Editor, Editorial Board).
- 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

APPENDIX 2 – 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 mas 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 20119 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 overviewing 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)