

**Comparing Multiple Interventions Methods Group
Meeting Minutes**

13:00-18:00, Thursday, April 19, 2012

Paris, France

Attendees:

Five co-covenantors (Tianjing Li, Lorne Becker, Julian Higgins, Debbi Caldwell, Georgia Salanti) and 21 colleagues attended the meeting.

Meeting agenda is available in the Appendix.

Minutes:

Rachel, Tianjing, and Lorne presented on “Initiating, managing, and coordinating review”, “Deciding on the review type”, and “Methodological considerations” respectively. We then opened the floor for large group discussion with the goal to generate common theme and topics for the CMIMG to address.

- ***Issues around redefinition of overview***

There is a significant lack of clarity around the definition of an overview. Some people are under the misconception that overviews are the best way or the only way to compare multiple interventions and that an overview or an intervention review that compares multiple interventions must always include a network meta-analysis or other statistical method for addressing indirect comparisons.

CMIMG clarified that both intervention review and overview could be used to compare multiple interventions. Further, a review that aims to compare multiple interventions may or may not include an indirect comparison or network meta-analysis. Only when appropriate should such analysis be pursued.

It was raised that the goal of synthesis is to address an important and well-defined clinical question and in this regard, the distinction between overview and intervention review is unimportant and should be deemphasized. The traditional overview of summarizing what’s available in the library could be taken on as editorials from review groups or CEU. In many cases, topics currently being addressed as overviews would be better handled as standard intervention reviews (that compare multiple interventions). Before we decide whether we continue to have overview as a publication type, a decision tree to guide authors in the decision of whether to address their question as an overview or as an intervention review would be helpful.

In addition, by simply juxtaposing results of the effectiveness of related interventions taken from different reviews, overviews risk misleading readers by encouraging them to make inappropriate informal indirect comparisons.

Despite these concerns about overviews, the idea of a review format that could be used to compare multiple interventions and to “lump” a set of related intervention reviews that have been traditionally “split” between different reviews remains attractive to many CRGs. It was also mentioned that funders like the idea of network meta-analysis.

Guidance should be provided on the skills required for an author team that wishes to undertake an overview or an intervention review that compares multiple interventions.

- ***Issues around initiating an overview***

It may be better to have the impetus for the initiation of an overview (or an intervention review that compares multiple interventions) come from the CRG, rather than from individual authors, since the CRG is in a better position to determine which topics are most in need of these more broadly-focused reviews.

Sign off on titles, protocols or completed reviews or overviews that address multiple interventions must rest with the CRG, but support from CMIMG (at the request of the CRG) would be helpful and appreciated by CRGs.

- ***Issues around searching and unit of analysis***

The current handbook guidance assumes that reviews will often turn out to be useful as both the targets of search in an overview and as units of analysis. While this may sometimes be true, in most cases overview authors need to perform additional searches for trials not included in the identified reviews and need to perform their analyses at the individual trial level rather than at the review level.

The search strategy suggested in the handbook for overviews (limiting the search to reviews or to Cochrane reviews would both be acceptable under current guidance) could lead overview authors to miss important trials and thus to introduce bias into their overviews.

Authors who wish to include data from previous Cochrane reviews in an intervention review or an overview that compares multiple interventions would benefit from some automatic mechanism to extract data from the previous Cochrane reviews in a format that could be used in their new review. This point has broad support from the attendees and needs to be explored further.

- ***Issues around assessing the methodological quality of existing reviews***

Even when up-to-date reviews are available that cover all of the interventions of interest, there are often multiple reviews (Cochrane and non-Cochrane) on the same or closely related topics. The methods for choosing between reviews in this situation have not been developed. The quality of trial-level data already extracted in the existing reviews must be carefully checked.

Although the handbook asks overview authors to assess the methodological quality of included reviews, there is no agreement on which tool or instrument should be used to carry out these assessments.

- ***Other issues***

Updating becomes an even greater challenge when both intervention reviews and overviews are available on a given topic.

Authors find it difficult to write the sections providing interpretation of analyses of multiple interventions.

It would be useful to provide a non-statistical reading list (as CMIMG already did on their website) for authors and CRGs. For example, lay language articles describing what is an indirect comparison and network meta-analysis and associated assumptions with applications.

There is an urgent need to train methodologists within the Collaboration on how to conceptualize and conduct a review that aim to compare multiple interventions.

The structure of the overviews module in RevMan does not work well for overviews that include analyses performed at the trial level.

Authors & CRGs are interested in continuing this discussion with the CMIMG, so does the CMIMG.

This confusion has led to a focus on the "lack of methodological expertise" which worried some CRGs, but not others. Some viewed it as a positive that they no longer had to work with multiple review teams but just 1! It was suggested that CMIMG could work with only a handful of (self-identified) review groups as a "pilot" for whatever policy/procedures we implement in future.

Holger et al. are already producing a SoF table for multiple interventions. She relayed that the CRGs were comforted by this progress.

The following general themes were brought up for further discussion:

1. What overview is or is not?
2. What should an overview protocol contain?
 - a. Could overview protocols branch? For example, an overview protocol could start with including existing intervention reviews and expand to include new trials and interventions not already covered when appropriate.
 - b. Network map? Evidence map?
 - c. NMA?
3. What involvement from CMIMG?

- a. What type of expertise is needed?
 - b. When should a review group begin to work with the methods group?
4. What type of Handbook guidance would be most useful to authors and CRGs?
5. What is the best way to start out? Pilot with a few reviews or CRGs?

Action items from the meeting:

1. Circulating minutes and making minutes and slides available on the CMIMG website.
2. Toby Lasserson will send a list of all published overviews and overview protocols.
3. Tianjing will contact Tom Trikalinos and Joseph Lau to find more information about what SRDR is intended to do and the data structure. For example, whether trial level data could be pulled out easily and be usable for network meta-analysis. Tianjing will involve Toby in the process.
4. Julian will schedule our next conference call to discuss steps for moving forward.
5. We discussed briefly the possibility of putting together a policy paper firming our desire to move towards CRD and our plan to maintain overviews for the Auckland Colloquium.
6. David Tovey mentioned the possibility of organizing a plenary session at the Auckland Colloquium focusing on issues with overviews and comparison of multiple interventions.

Appendix: Meeting Agenda

Comparing Multiple Interventions Methods Group Meeting Agenda

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Goal

To seek input and feedback on developing new guidance for the production of Cochrane Intervention Reviews and Overviews that compare multiple interventions.

- 13:00 **Welcome and review of agenda**
– *Lorne Becker, Tianjing Li, Rachel Churchill*
- 13:10 **Initiating, managing and coordinating reviews**
Deciding on the review type
Methodological considerations
– *Rachel Churchill*
– *Lorne Becker*
– *Tianjing Li*
- 13:50 **Group discussion to prioritize issues**
– *Facilitators: Rachel Churchill, Lorne Becker, Tianjing Li*
- 15:00 **Break**
- 15:30 **Summary of group discussion**
- 15:40 **Small group discussion on issues raised**
– *Small group 1: Lorne Becker & Debbi Caldwell*
– *Small group 2: Tianjing Li & Julian Higgins*
– *Small group 3: Rachel Churchill & Georgia Salanti*
- 16:40 **Summary of small group discussion**
- 17:00 **Summary of the meeting and next steps**