

Comparing Multiple Interventions Methods Group

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About Us

The Comparing Multiple Interventions Group focuses on methodology for comparing multiple interventions in the context of both Cochrane systematic reviews on the effects of interventions and on Cochrane Overviews of reviews. We consider how to best meet the needs of a healthcare decision-maker approaching the Cochrane Library asking "which intervention should I use for this condition?"

Overviews were developed by the 'Umbrella Reviews Working

Group', and aim to summarize the findings of multiple standard Cochrane reviews, for example when different reviews address different interventions for a single clinical condition. A key aim of the Methods Group is to consider how the aims, methods and processes for Overviews might evolve over time.

The Methods Group also brings

together expertise in network meta-analysis (also known as multiple treatment meta-analysis, or mixed treatment comparisons). We are exploring issues around the validity, breadth, structure and interpretation of these methods in standard intervention reviews as well as their potential role in Overviews.

We were registered as a Methods group in September 2010 with our core functions stated as (i) providing policy advice, (ii) serving as a forum for discussion, (iii)

providing training, (iv) providing peer review, (v) providing specialist advice, (vi) contributing to software development and (vii) ensuring the group functions as part of the Cochrane Collaboration. As of April 2012 we have 68 members. If you would like to join CMIMG please contact Tianjing Li tli@jhsph.edu.



Co-Convenors:

Georgia Salanti, Lorne Becker, Deborah Caldwell, Julian Higgins, Tianjing Li and Chris Schmid.

Contact Details

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Please see our website for up to date information on our activities
<http://cmimg.cochrane.org/>

CMIMG offer peer review

Cochrane Review Groups are encouraged to consult the Comparing Multiple Interventions Methods Group (CMIMG) when undertaking a conventional Intervention review or an Overview of systematic reviews that aims to simultaneously compare multiple interventions, irrespective of whether a network meta-analysis is planned. The review teams for such reviews should involve a statistician or methodologist with expertise in the techniques (e.g. indirect comparison or network meta-analysis) if these are likely to be employed.

The CMIMG offers methodological peer review support for titles, protocols, and review manuscripts that explicitly state that their objective is to compare multiple interventions, and therefore an indirect comparison and/or network meta-analysis is likely to be used.

Peer review request should be sent to Tianjing Li (tli@jhsph.edu). In the request, please describe in sufficient detail (1) the type of review (e.g. intervention review or Overview of reviews); (2) whether the authors aim to simultaneously compare multiple interventions for a given condition; (3) whether the authors foresee that an indirect comparison and/or network meta-analysis will be employed; and (4) whether statistical support is needed and is likely to be substantial.

Given the limited resources we have at the moment, the CMIMG will help to identify methodologists who can either provide comments, or get involved in the review based on the review team's need for expertise. However, it would be the Review Group's responsibility to communicate with the methodologist and arrange an agreeable timeframe for getting the comments back. When a review team is working closely with a methodologist designated by the CMIMG, authorship should be offered to the methodologist if the amount of support is considered to be substantial and meets accepted criteria for authorship.

Training and Workshops

Forthcoming training events

The CMIMG regularly provide training workshops at Cochrane Colloquia. Due to the smaller size of the Colloquium to be held in Auckland in September 2012 we will be condensing our usual three workshops into two. Workshop one will cover basic methodological considerations such as deciding whether to undertake an intervention review or an overview. Workshop two will cover statistical methods for network meta-analysis. For further information see the 2012 Colloquium website

<http://colloquium.cochrane.org/workshop-list>

We have also received Cochrane Methods Training event funding for 2013. We propose to run a 3-day course; with day 1 covering conceptual issues and days 2 and 3 covering statistical issues..

Further details will be announced on our website as they become available.

Previous training events

In 2011 we provided 3 workshops at the Madrid colloquium. Slides from these workshops are available from our website:

<http://cmimg.cochrane.org/workshops-19th-cochrane-colloquium-october-2011>.

In January 2012 CMIMG convenors Julian Higgins and Georgia Salanti ran a course on "*Indirect comparisons and network meta-analysis: Evidence synthesis with multiple treatments*" as part of The Swiss Epidemiology Winter School (<http://www.epi-winterschool.org/>). The course was well received by its participants and is due to be repeated in January 2013.

Research Framework and Agenda

The Comparing Multiple Interventions Methods Group has received funding from the Cochrane Methods Innovation Fund to address specific issues related to the comparison of multiple interventions in Cochrane reviews. The project involves three meetings and working groups to bring together investigators, methodologists, authors, consumers, managing editors and other interested parties to help CMIMG develop consensus guidance for carrying out reviews of multiple interventions.

The first working group will address fundamental issues associated with the initiation and logistics of undertaking, publishing and maintaining reviews that compare multiple interventions. This working group held a meeting in Paris in April 2012, alongside the Mid-year meeting, to establish a consensus to inform specific policy advice for CRGs. Please see our website for the agenda and a background paper circulated to participants (<http://cmimg.cochrane.org/paris-meeting-comparing-multiple-interventions-cochrane-reviews>). The second working group is concentrating on the statistical considerations, addressing questions such as “When are indirect comparisons and network meta-analysis appropriate?” and “What are the appropriate statistical methods for indirect comparisons and network meta-analysis?”. The third working group is focusing on the interpretation of the evidence included in a multiple interventions review. Questions addressed by this group include: “What is the role of Risk of Bias in indirect comparisons?” and “Is direct evidence always preferable to the indirect evidence?”. To facilitate these three streams of work the CMIMG have formed close links with GRADE Working Group, the Cochrane Applicability and Recommendations Methods Group and the Cochrane Bias Methods Group.

Meetings

We held a meeting in March 2011, supported by the Cochrane discretionary fund and the Italian Cochrane Centre. The meeting focused on establishing a research framework and achieving objectives. These included examining how the aims, methods and processes for Cochrane Overviews might evolve over time and exploring the role of network meta-analysis in both Overviews and Intervention reviews. Participants included methodologists with expertise in comparing multiple interventions, five Co-ordinating Editors, a recent Managing Editor, a Trials Search Coordinator, a Field Convener, a Centre Director, authors of Overviews and Intervention reviews, and the Editor-in-Chief. The meeting report is available from cmimg.cochrane.org.

Six key recommendations arose from the meeting, including: (i) that CRGs should be

encouraged to identify existing Intervention reviews comparing multiple interventions and consider the feasibility of indirect comparisons and network meta-analysis and (ii) that Overviews should be redefined as reviews that integrate or synthesize (rather than summarize) evidence from existing systematic reviews, and should address a well defined clinical question. In addition to further policy recommendations (see report) the Milan meeting also initiated three Working Groups to tackle some of the methodological, practical and editorial issues that arise when undertaking an Overview or Intervention review comparing multiple interventions. The research agendas of these working groups are being funded from the Cochrane Methodological Innovation Fund, which CMIMG was awarded in late 2011 (as above).

We also hold a business meeting once a year; in 2011 it was held at the Madrid Colloquium.

Publications and Bibliography

We maintain a list of the overviews of reviews and registered protocols that are currently available on the Cochrane library. Please see <http://cmimg.cochrane.org/cochrane-overviews-and-overview-protocols> for the full list. We would also like to maintain a bibliography of publications on methodological issues of systematic reviews of multiple interventions (<http://cmimg.cochrane.org/publications-methodological-issues>). If you would like to contribute to the list please email Lorne Becker lornebecker@gmail.com