

Guidance for conducting overviews of reviews: an update of the Cochrane Handbook chapter

Lisa Hartling, PhD

October 8, 2015 Vienna, Austria

Trusted evidence.
Informed decisions.
Better health.



## More refined definition:

Overviews of reviews bring together multiple systematic reviews addressing a set of related interventions, conditions, populations, or outcomes. <u>Cochrane</u>
 <u>Overviews</u> use explicit and systematic methods to search for and identify multiple Cochrane Intervention reviews, and potentially non-Cochrane systematic reviews of healthcare interventions, on a similar topic for the purpose of extracting and analyzing their results across important outcomes.



# Components of a high-quality Cochrane overview

- Contain a clearly formulated objective designed to answer a specific research question.
- 2. Intend to search for and include only SRs (with or without metaanalyses).
- 3. Use explicit and reproducible methods to identify multiple SRs that meet the Overview's inclusion criteria and to assess the <u>risk of bias</u>, <u>methodological quality</u> and/or <u>reporting</u> of these SRs.
- 4. Intend to collect, analyze and present the following information from included SRs: descriptive characteristics of the SRs and included primary studies; <u>risk of bias</u> of primary studies; <u>quantitative outcome</u> <u>data</u>; and <u>quality of evidence</u> for pre-defined, clinically important outcomes (i.e., <u>GRADE</u> assessments).



#### What an overview is not:

 Cochrane Overviews do not aim to simply extract and present the conclusions of the relevant systematic reviews. Actual outcome data should be extracted and presented, and Overview authors are encouraged to interpret these outcome data themselves in the context of their pre-specified objectives and research question(s) in order to reach their own conclusions.



# **Purpose of Overviews:**

- To generally **describe** the current body of systematic review evidence on a topic of interest.
- To address a pre-specified clinical question of interest.



# **Purpose of Overviews:**

- Help determine the most appropriate approach to data analysis and presentation.
- When the purpose of an Overview is to describe the current body of systematic review evidence on a topic of interest, outcome data will often (but not always) be **summarized** across included systematic reviews.
- When the purpose is to answer a pre-specified clinical question of interest, outcome data will often (but not always) need to be re-analyzed, though the amount of re-analysis required can vary substantially between Overviews.



## **Overview or Intervention Review**

CMIM.cochrane.org

Will this be a review of reviews?

Does this fit with CRG priorities?

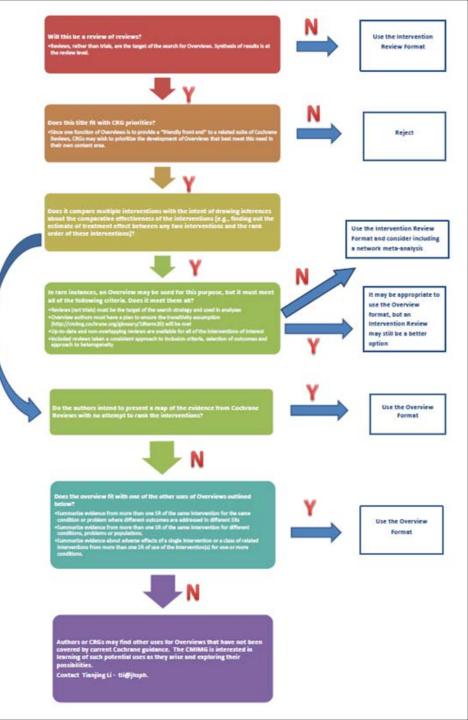
Does it compare multiple interventions with the intent of drawing inferences about comparative effectiveness?

Criteria for comparative effectiveness.

Do author intend to present a map of evidence without ranking interventions?

Does overview fit with one of the other uses of overview format (e.g., single intervention for multiple conditions)?

Other use of Overview not covered by current Cochrane guidance?





# **Including non-Cochrane reviews**

- Advantages and Disadvantages
- Guiding questions:
  - Is the purpose of the Overview to generally describe the complete body of systematic review evidence on a specific topic of interest, or to address a pre-specified clinical question of interest?
  - Are there relevant Cochrane Intervention reviews on all major interventions and/or disorders of interest? If no, is this important?
  - Are all Cochrane Intervention reviews current? If no, is this important?



#### **General methods**

- More detail on how to conduct the overview, i.e., specific steps
  - Organizational considerations
  - Author team composition and roles
  - Defining the clinical research question(s)
  - Developing criteria for including systematic reviews
  - Searching for systematic reviews
  - Selecting systematic reviews for inclusion
  - Assessing risk of bias, methodological quality and/or reporting of included systematic reviews (tools commonly used)



#### **General methods**

- More detail on how to conduct the overview, i.e., specific steps
  - Collecting, analyzing, and presenting data from included systematic reviews: An introduction
  - Collecting and presenting data on descriptive characteristics of included systematic reviews (and their primary studies)
  - Collecting and presenting data on risk of bias of the primary studies contained within the included systematic reviews
  - Collecting, analyzing, and presenting quantitative outcome data (removed network meta-analysis, indirect comparisons)
  - Assessing quality of evidence of quantitative outcome data using the GRADE tool



## **Additional sections**

- Including non-Cochrane SRs
- Format and reporting guidelines
- Additional considerations
  - Searching for primary studies in an overview
  - Conducting network meta-analysis
  - Updating an overview
- Future directions and methods research
- Challenges that authors may encounter when conducting an Overview of reviews
- Important definitions