

Cochrane Rapid Reviews

Interim Guidance from the Cochrane Rapid Reviews Methods Group

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Cochrane Rapid Review (RR) Definition

Definition of a Cochrane Rapid Review (RR)

"A rapid review is a form of knowledge synthesis that accelerates the process of conducting a traditional systematic review through streamlining or omitting specific methods to produce evidence for stakeholders in a resource-efficient manner." ¹

Cochrane RRs should be driven primarily by requests for timely evidence for decision-making purposes including to address urgent and emergent health issues and questions deemed to be of high priority.

Cochrane Rapid Review Methods - Interim Recommendations

Setting the Research Question – Topic Refinement

- Involve key stakeholders (e.g., review users such as consumers, health professionals, policymakers, decision-makers) to set and refine the review question, eligibility criteria, and the outcomes of interest. Consult with stakeholders to ensure the research question is fit for purpose, and regarding any ad-hoc changes that may occur as the review progresses.
- Develop a protocol that includes review questions, PICOS, and inclusion and exclusion criteria.

Setting Eligibility Criteria

- Together with key stakeholders:
 - $\circ~$ Clearly define the population, intervention, and comparator
 - o Limit the number of interventions and comparators
 - Limit the number of outcomes, with a focus on those most important for decision-making
 - $\circ~$ Consider date restrictions with a clinical or methodological justification
 - \circ $\;$ Limit the publication language to English; add other languages only if justified
- Place emphasis on higher quality study designs (e.g. systematic reviews²); consider a stepwise approach to study design inclusion.

Searching

- Involve an Information Specialist.
- Consider peer review of at least one search strategy (e.g., MEDLINE).
- Always search Cochrane CENTRAL, MEDLINE (e.g., via PubMed) and Embase (if available access).
- Searching of specialized databases (e.g., PsycInfo, CINAHL) is recommended for certain topics but should be restricted to 1-2 additional sources, or omitted if time and resources are limited.
- Limit literature searches to English language; add other languages only if justified.
- Limit grey literature and supplemental searching. If justified, search study registries and screen reference lists of other reviews, or included studies AFTER screening of the abstracts and full texts. Screening reference lists can detect studies that were missed during the searches of the electronic databases or eligible studies that were erroneously excluded during literature screening.

Study Selection

Title and Abstract Screening

• Using a standardized title and abstract form, conduct a pilot exercise using the same 30-50 abstracts for the entire screening team to calibrate and test the review form.

¹ C Hamel, A Michaud, M Thuku, B Skidmore, A Stevens, B Nussbaumer-Streit, C Garritty. Defining Rapid Reviews: a systematic scoping review and thematic analysis of definitions and defining characteristics of rapid reviews. Submitted to JCE, February 2020.

² To be considered a systematic review for screening purposes, studies need to clearly report inclusion/exclusion criteria; search at least two databases; conduct risk of bias assessment; and provide a list and synthesis of included studies.

- Use two reviewers for dual screen of at least 20% (ideally more) of abstracts, with conflict resolution.
- Use one reviewer to screen the remaining abstracts.
- Use a second reviewer to screen all excluded abstracts, and resolve conflicts.

Full Text Screening

- Using a standardized full text form, conduct a pilot exercise using the same 5-10 full-text articles for the entire screening team to calibrate and test the review form.
- Use one reviewer to screen all included full text articles.
- Use a second reviewer to screen all excluded full text articles.

*Software should be used to make screening more efficient

Data Extraction

- Use a single reviewer to extract data using a piloted form.
- Use a second reviewer to check for correctness and completeness of extracted data.
- Limit data extraction to a minimal set of required data items.
- Consider using data from existing systematic reviews to reduce time spent on data extraction.

Risk of Bias Assessment

- Use a valid risk of bias tool, if available for the included study designs.
- Use a single reviewer to rate risk of bias, with full verification of all judgements (and support statements) by a second reviewer.
- Limit risk of bias ratings to the most important outcomes.

Synthesis

- Synthesize evidence narratively.
- Standards for conducting a meta-analysis for a systematic review also apply to a RR; consider a meta-analysis only if appropriate (i.e., studies are similar enough to pool). This will also depend on the nature of the data and information provided in the individual studies identified.
- Use a single reviewer to grade the certainty of evidence, with verification of all judgements (and footnoted rationales) by a second reviewer.

Other Considerations for Cochrane RRs

RRs should be preceded by a protocol submitted to and approved by Cochrane; the protocol should be published (e.g., Cochrane Library, PROSPERO or Open Science Framework); allow for post-hoc changes to the protocol (eligibility criteria etc.) as part of an efficient and iterative process; document all post-hoc changes; incorporate use of online SR software (e.g., Covidence, DistillerSR, EPPI-Reviewer) to streamline the process; and systematic reviews (SRs) should be considered a relevant study design for inclusion.

Importantly, methods selected for each Cochrane RR will need to take into account the RR timeline (1 week up to 6 months, starting once protocol details are approved) and available resources using a tailored approach.

Note. These are provisional recommendations from the Cochrane Rapid Reviews Methods Group and are based, in large part, on an evidence-informed survey of representatives from 20 Cochrane entities, who were asked to rate and/or rank rapid review methods across stages of review conduct. The survey was developed with input from a team of methodologists with experience in conducting both systematic reviews and rapid reviews, including an expert advisory committee. Recommendations are based on items for which there was a high (endorsed by ≥70% of respondents) or moderate (endorsed by ≥50-69% of respondents) level of agreement. Items that ranked highest or scored highest in the absence of high or moderate agreement have also been recommended.

We encourage the use of this interim guidance and welcome your feedback. Please also reach out to us if you require more information. Contact us at: rapidreviews@cochrane.at