Reviewer's report

Title: Study flow diagrams in Cochrane systematic review updates. An adapted PRISMA flow diagram

Version: 1 Date: 10 March 2014

Reviewer: Kathleen Lohr

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Please number your comments and divide them into:

- Major Compulsory Revisions
  1. Entire Manuscript: please ask a copy editor to take a careful pass through the MS (revised as needed) before resubmitting.

- Discretionary Revisions
  2. Background: I recommend that the authors define several terms or phrases listed below (italics). (Perhaps use just a little text box or table?) Cochrane Collaboration readers (e.g., review groups) will likely share the authors’ sense of these constructs, but other readers, for whom this will be important “preliminary” or “draft” guidance may not. (For purposes of these comments, I’ll use PRISMA-U for this proposed flow chart.)
     a. Update. I am not clear [1] whether updates take place on a nearly routine or ongoing basis (entailing ongoing searches) or [2] whether they are done only after a few years have elapsed and, perhaps, only after the same or a different set of authors have taken steps to document that an update is needed. In addition, is a second (or third? Or more) update, perhaps quite some years down the road from the original review and a few years from the first update, truly still considered an “update”? As update is used in the MS, it could well refer to a variety of these situations. I think the construct of an “update” applies chiefly to the second situation, but conceivably it is intended to review to several updates over quite a long period.
     The authors may be adding some confusion by referring to a “previous review version.” A single previous version is presumably the original review. However, more than one previous review version seems to be a possibility, and then the idea of an update becomes a little murky. Perhaps clarifying what a previous review version is, and whether the phrase can include both an original and an
update (or more than one update), would help – i.e., indicate, if true, that an update can be, in fact, an update of an update.

I’d note that elsewhere in the MS, the authors refer to “each version of the review.” To my mind, versions are not the same as an original and one or more updates, but if the terms are intended to be interchangeable, then the authors should be explicit about that usage.

In addition, in discussion, the authors refer to “publication cycles.” I am not certain I know what that means – multiple publications of a single review (some large review; one or more journal articles?) or publication of the original review, then publication of the update, then publication of an update of the update? Or something else?

Finally, in Discussion, the idea of “review phase” turns up. I do not know how to map that to the foregoing concepts because, to me, a review’s phases would start with, say, a protocol and run through all the usual steps of a review (reviewing titles/abstracts and full-text articles, assessing risk of bias, maybe doing MAs, grading strength of evidence, and so forth). IF the idea is that “review phase” might be Phase I = original review, Phase II = update of that review, Phase III = update of that update, and so on, then that needs to be clarified, too. The issue then becomes: what constitutes “multiple searches.”

b. Multiple searches. I see several possible scenarios for authors to do more than one search. For that reason, I was not clear when “multiple searches” become multiple because of an update (as thought of above), necessitating a PRISMA-U diagram (or a repeat PRISMA-U at an even later date if the product is an update of an update). Being more specific about what this construct means will be helpful for users, too, I think.

3. Diagrams. The authors rightly want to avoid numerous diagrams that have only minor changes in them over time. However, for an update, is it not possible to retain the “original” PRISMA diagram, perhaps in an appendix, and present the PRISMA-U diagram in the main body of the review. Similarly, for updates of updates (if that is the concept), couldn’t reviewers retain both the original and the first PRISMA-U diagrams (again, maybe in appendix) and present a newer PRISMA-U in the main report?

Perhaps users of reviews would be momentarily puzzled by multiple diagrams, but I think they would come to understand the reasoning for the record keeping and, eventually, to expect such documentation. I do find it hard to imagine this
going on indefinitely (e.g., many updates over years) before the topic really needs to “start over.” (Especially if no articles are included...) It may be the case that the “average reader” might not get much from the information, but really the argument is that all this needs to be documented someplace (where it can be retrieved). That is one reason I think having more than one diagram available in an update is feasible and worth considering. “Dates” of searches could be handled in text or in a footnote to the diagram, perhaps, if one wants to avoid cluttering up the diagram too much. As to the actual figure: might it be sensible to use some formatting technique to distinguish the past from the present. For instance, if all the main boxes have rounded corners, could the “previous” information such as the sum of the earlier searches (or included articles) be put in a box with square corners or in an oval or something like that? I also wondered whether any parallelism might be invoked for critical words – e.g., TOTAL and NEW are all caps, and previous might usefully be done as PREVIOUS.

4. Information scientists. This sentence might warrant some rethinking: “The extra information on multiple searches clearly has value internally as it demonstrates the ongoing support an information specialist provides to a review team, however, it is not clear what value this information adds to the average reader of a systematic review.” I believe we all know how integral our librarians (information specialists) are to a defensible, comprehensive, accurate systematic review, and thus arguing that providing the “extra information” for the purpose of demonstrating value to the review team struck me as a little odd – I’d consider deleting that material.

Please note that both the comments entered here and answers to the questions below constitute the report, bearing your name, that will be passed on to the authors and published on the website if the article is accepted.

**Level of interest:** An article of importance in its field

**Quality of written English:** Not suitable for publication unless extensively edited

**Declaration of competing interests:**

I have no competing interests.