

Module 19: Maintaining your review

In this module we discuss why it is important to keep your review up to date, some issues about the timing of updating and the process of updating your review.

Learning objectives

- Understand the rationale for updating reviews
- Be able to plan when and how to update a review
- Responding to comments and criticisms

Relevant sections of the *Cochrane Handbook for Systematic Reviews of Interventions*

- Chapter 3: Maintaining reviews: updates, amendments and feedback

Where does this go in your Cochrane review?

- This will depend on what components of your review need updating. It may be that there is little to change, but if you identify new evidence on your search, updating may involve altering many of the sections of your review.

Why update a review?

The main aim of a Cochrane review is to provide the ‘best available’ and most up-to-date evidence which can be used by consumers, clinicians and policy makers to bring about improvements in health care. Clinical practice guidelines are often based on Cochrane or other systematic reviews and increasingly funding agencies internationally are requiring systematic reviews to justify the need for new clinical trials (and other forms of research). As a result, in the last decade the number of systematic reviews published either electronically (through the Cochrane Collaboration) or in paper journals has greatly increased.

As new evidence becomes available it may be necessary to update your review

However, since evidence on a given subject is generally dynamic and continually evolving as new research becomes available, systematic reviews run the risk of becoming out of date and even misleading. To date, there is little empirical data available to allow informed decisions about what is a reasonable and efficient approach to updating evidence in Cochrane reviews, although some guidelines do exist.

We do know that incorporating additional studies as they become available may, on occasions, change the results of a review. However, there is a risk that updating evidence too frequently may result in introducing a different form of bias related to the slower publication (or even non-publication) of studies with negative and inconclusive results.

In addition to new evidence, advances in treatments, outcome measures and diagnostic tools may result in a need to update your review

You may be able to gauge from doing the review whether the research relevant to your review is being published frequently, suggesting your review should be updated sooner, or if you should wait a while.

In addition, other developments in your research field may result in you needing to update your review. Some examples may be better tools or markers for characterising sub-groups, new treatment regimens and/or comparisons, or new outcome measures (or refined measurement methods of existing outcomes).

In contrast, there may be areas where new evidence or data are not emerging and a review prepared many years earlier is still current and valuable. In these cases updating your review may be unnecessary and wasteful.

Cochrane reviews are unique in that reviewers are committed to not only preparing systematic reviews of evidence but also to maintaining (and updating) these reviews on a regular basis. The current recommendation is that your review should be updated at least every two years, or else a commentary added to it to explain why the update has not been done.

How to update your review



Read Section [3.4](#) of the *Cochrane Handbook for Systematic Reviews of Interventions*

Section 3.4 of the *Cochrane Handbook for Systematic Reviews of Interventions* discusses some of the issues involved in updating your review and you should read it now.

The process of updating a Cochrane review will depend on the structure of the original review and the amount of new data available since the previous publication of the review. Probably the key factor in updating your review is to periodically update your literature search to assess if there are any new studies relevant to your review question. Some review groups will be able to give you more help with this than others. Some intermittently send new trials to reviewers, and all groups will maintain their own trial register. At the least you should keep an eye on the Cochrane Central Register of Controlled Trials (CENTRAL), published on *The Cochrane Library*, and your review group's trial register.

If new trials are identified, they need to be assessed for inclusion in your review using the same process (and form) as your original review. If they are to be included, data are extracted and entered into RevMan as in your original review. Don't forget to update your results text, discussion, conclusions, and abstract accounting for the new evidence, and highlight any differences it may have made in the What's New section of your review.

Use the 'What's New' section of the review to highlight any changes resulting from your update.

Sometimes updating your review results in new outcomes or comparisons being added. If this is the case, your original data extraction forms may need to be altered or extended, and piloted again. If this is the case, it might be necessary to go back to the original included trials and check that they did not include any information relevant to this new outcome or comparison.

Another possible update to a review is more methodological. As systematic review methodology advances, and the techniques available in RevMan are extended, it may be possible to perform additional analyses or strengthen existing ones not available in an earlier version of your review.

There is variability between review groups about when and if your updated review should again go through the process of editorial review. If your update involves no further analysis or change of result, it may not need to be refereed, however if there are new analyses and changes to conclusion, the same pre-publication process that was followed for your original review is likely to be repeated. You will need to check with your review group regarding their editorial policy for updated reviews.

If the update of your review leads to changes in your conclusions that you and your review group decide are important enough that anyone who read the review in the past should read it again, you should mark the review as 'conclusions changed' in the 'What's New' section of your review in RevMan.

Sometimes a search of the new evidence reveals there is no need to update your review. If this is the case, you should still update the date of the search strategy and indicate in the What's New section of your review that a search has been done, resulting in no additions or changes to your review.

Comments and Criticisms



Read [Section 3.6](#) of the *Cochrane Handbook for Systematic Reviews of Interventions*

The ability to comment on a review allows users of Cochrane reviews to contribute to the updating process. Section 3.6 of the *Cochrane Handbook for Systematic Reviews of Interventions* discusses responding to criticisms and you should read it now.

A strength of Cochrane reviews is that they can be updated every quarter with publication of the new issue of *The Cochrane Library*. This means that you can alter or correct your review in response to valid criticism or comment, which is posted to your review group via the 'submit feedback' function on *The Cochrane Library*, or via the Cochrane website. Sometimes these criticisms take the form of letting reviewers know of a new or missed trial to be assessed for inclusion in an update, and sometimes they point out a potential error in the review which can be corrected, or the criticism responded to as appropriate.

Summary

While time consuming and ongoing, the process of updating Cochrane reviews is one of the key factors setting them apart from almost all other reviews. You need to carefully plan how and when you are going to update your review, and who will take responsibility to ensure it happens.