

# Project A - Review monitoring system

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## A.1 Background

Around the world, policy makers, healthcare professionals and publishers use Cochrane Reviews as the foundation for practice, clinical guidelines and various derivative products. At the Cochrane Colloquium in Freiburg, we heard from several speakers how Cochrane Reviews provide an important high-quality source of information within their organisations. A representative of Kaiser Permanente spoke of extensive use of Cochrane Reviews in their Clinical Guidelines, Medical Technology Assessments and Evidence Summaries. The World Health Organisation (WHO) is using Cochrane Reviews in their guidelines and in implementing the Essential Drugs list, and called for the Collaboration to provide more accessible, easy-to-use and timely information. We also produce derivative products as output of the Collaboration – for instance Evidence Summaries, Overview of reviews and podcasts; and many other derivatives exist in, for example, “Cochrane corners” in journals

Currently, those who have used Cochrane reviews as a basis for clinical guidelines and similar publications intended for national or international audiences rely on manually detecting whether a review has been changed and looking through the review to detect the changes if they are concerned about the stability of their recommendations to changes to the reviews. Such users might benefit from a ‘push’ model, in which they request notification of changes, and these are sent to them as soon as they occur. For example, Wiley-Blackwell may be able to offer a service that lets users subscribe to alerts for when a review has been updated (triggered by the marking of reviews as ‘Update’ or ‘New citation’, for instance), but it will not be possible through the Wiley-Blackwell system to detect automatically what the changes in a review are and to inform the user of these specific changes.

## A.2 Proposal and discussion

All Cochrane reviews have the same, highly structured format, which makes it possible to query or monitor changes to any text or data element within individual reviews and across collections of reviews. We propose that the Collaboration should exploit this finely detailed structure of Cochrane reviews to make it easier for policy makers, guideline developers and others to get easy access to information about changes in updated reviews, without having to check the entire content of the review manually. Through a restricted interface in Archie, users (or a designated manager) should be able mark specific reviews for this monitoring, including an indication of which particular elements of a review should be monitored. The combinations of possibilities for monitoring are numerous and varied, and would need to be determined in collaboration with stakeholders both internal and external to the Collaboration, but examples of services that could be offered include:

- Alerts when a protocol is turned into a full review
- Alerts when outcomes of a particular review changes (with or without details)
- Alerts if a review is withdrawn
- Alerts and details of Authors’ conclusions when an amended review results in a new citation version with Conclusions changed.
- Alerts when a review is updated (incorporating results of a new search) and information about the number of studies, patients and events added to the meta-analyses
- Alerts and details of changes to an Abstract
- Alerts and details of changes to a Plain Language Summary
- Alerts about changes to reviews that are summarised in an Overview of Reviews
- Alerts about changes to reviews for which a podcast exists
- Alerts about the availability of new reviews or changes to existing reviews that are of interest to a particular topic, e.g. Evidence Aid.

For selected stakeholders, it could also be made possible to be alerted and get access to relevant information in advance of publication of a relevant Cochrane review, that is, as soon as a review is released for publication by the CRG. This might be especially attractive for the Collaboration itself, for instance for:

- Updating of podcasts for reviews that have conclusion changed
- Updating of new Evidence Aid summaries and creation of new summaries to coincide with publication of new relevant reviews
- Updating of Overview of Reviews
- Translations of reviews or subset of reviews (also relevant for external stakeholders)
- Updating the cross referral to the updated review in other Cochrane reviews

For external stakeholders, such as national and international guideline producers, early access would also be attractive. Allowing access to embargoed review data would let guideline producers start working on updating their guidelines as soon as new evidence become available and would allow them to respond appropriately to comment when the new data becomes public. The service could be complemented with the delivery of live links to specific elements of the published review, e.g. a meta-analysis graph. Guideline producers could insert these links into their guidelines with a minimum of effort, but it would greatly enhance the transparency of their work, allowing users of the guideline to see exactly what data were considered in the guideline (for example, in support of a specific recommendation). The Collaboration would also gain considerable knowledge about the reviews, and parts of reviews, being used in guidelines, which would be useful knowledge for prioritisation.

There are a variety of ways in which a review monitoring service could be made available. One possibility might be to make it a complimentary part of the package that countries get access to through their national licence to The Cochrane Library, thus making it more attractive with a national subscription.

The proposed new service will help the Cochrane Collaboration to present itself as an attractive strategic partner for non-commercial entities such as Global Health organisations and national guideline producers. In addition, it might also help raise income for the Collaboration. For example, the availability of a complimentary service to national subscribers might persuade countries to decide in favour of a national licence; and commercial partners such as publishers who base their products on Cochrane reviews or managed care organisations, like Kaiser Permanente, might purchase the service as it has the potential to greatly enhance the services they deliver to their customers and lead to efficiencies within their own systems.

There are no specific cases in our wish list system on this project. The proposal presented here is based on discussions with and ideas brought forward by various members of the Collaboration, including Mike Clarke, former IMSG convenor, and the IMS team.

#### A.2.1 Dependencies on other projects

This project is dependent on the implementation of a replacement for the Parent Database (Project 4).

### A.3 Summary of recommendations

Resources should be allocated to work on a pilot project that will deliver a core system for monitoring changes to Cochrane Reviews and a business plan for further development and marketing of the proposed service. We recommend that we pilot the system with WHO, which would be a strong strategic partner and signal the Collaboration's intention to contribute to Global Health. The results of this project should help to determine how the Collaboration could best provide the service more broadly, including planning the best way of managing commercial and non-commercial 'subscriptions' to changes to reviews through the system.

### A.4 Resource implications

Resource implications for the pilot project are approximately 4 FTE weeks analysis and design, 8 FTE weeks development, 4 FTE weeks for testing and technical documentation. Some resources will also be required for discussions with the Publishing Policy Group, Wiley-Blackwell and others in the Collaboration about various business models.

## A.5 Impact statement

The Collaboration's goal is to improve access to evidence about health care. With the service described above, the Collaboration can help to ensure that the evidence it produces is disseminated more effectively and timely. It would provide a service that no other publisher of systematic reviews is capable of, thus helping to maintain and increase the Collaboration's market value. The service would also help the Collaboration to establish formal partnerships with parties who are already re-using Cochrane Reviews in various other products.