

Conversation between Stephanie Wykstra (GiveWell) and Dr. David Tovey (Cochrane Collaboration, Editor-in-Chief), August 14, 2012

Note: this is not a verbatim transcript. It is a set of summary notes compiled by GiveWell in order to give an overview of the major points made by David Tovey in conversation.

Important priorities for The Cochrane Collaboration include::

1. Research prioritization: Assessing the needs of the medical community and determining the questions that matter most to health care decision makers.
2. Content production: Producing high quality reviews addressing these questions
3. Dissemination: Communicating the information in these reviews to policy makers, health professionals and patients.

If Cochrane received an increase in funding, we could use the funding toward these ends. Creating high quality systematic reviews is Cochrane's top priority, but a priority for the organization is to strengthen its efforts to make the findings of its reviews better known to the public.

If GiveWell wanted to fund Cochrane, GiveWell could fund entities such as review groups or centers directly, or it would also be possible to provide funds to the Cochrane Editorial Unit or other central bodies. If GiveWell were to direct funding to the Cochrane Editorial Unit, we could form a plan as to how to use the funds, how best to distribute funding to other Cochrane entities to support prioritised activities and so on. This would involve engaging with external stakeholders who use Cochrane reviews so as to assess the stakeholders' needs.

Research prioritization

Different review groups have different processes for selecting review topics and questions to be answered by the reviews. The Cochrane Eyes and Vision group has looked at the medical guidelines connected with eye disease and focused on areas where the supporting research has clear uncertainty. Other review groups collaborate with the James Lind Alliance, an organization which works to determine what the greatest medical research priorities of consumers and health professionals are. Still other review groups have approached special interest groups concerned with particular health care issues and have asked them what questions they would like to have answered.

At the administrative level, Cochrane has a policy that review groups conduct prioritization annually. In the future I would like review groups report to me about this in my capacity as the editor-in-chief. Part of my role is to keep informed as to what national governments say their health priorities are and use this information to help review groups understand priorities in their area.

Review production

While Cochrane reviewers have historically been the ones to propose topics for reviews, Cochrane has been shifting toward prioritizing review topics by public health need. I don't think that there's a difficulty in recruiting authors to do reviews on the topics selected: potential reviewers want their reviews to be noticed and have an impact and so are happy to do reviews on topics which have been highlighted as being highly significant to public health.

Historically, Cochrane has not provided funding to reviewers. Occasionally reviewers funded by another funder to do a specific review, but much of the time they are doing the review as a part of their

academic research. Because the process of performing a systematic review is very time-consuming and challenging, there is a trend towards Cochrane review authors requiring some funding, and I think this trend will continue. At present, this is uncommon within Cochrane, though a number of organizations other than Cochrane commission reviews. While it does not typically provide funding to reviewers, Cochrane does provide in-kind support such as search support, editorial support and assistance with data analysis.

Gaps in the Cochrane literature

There are a number of subject matter gaps in the collection of Cochrane reviews. Some of these are:

- ⤴ Diagnosis (across health areas)
- ⤴ Noncommunicable diseases in low and middle income countries
- ⤴ Infections other than tropical diseases such as malaria or TB. E.g. Kidney infections, Hospital acquired infections, Sterilization procedures
- ⤴
- ⤴ Delivery of health interventions and health systems research

Diagnosis is an area with an especially large gap and where there's an especially great need for better information. There are important examples of health conditions that are under or over diagnosed and about the effectiveness of different diagnostic procedures.

Cochrane has difficulty doing systematic reviews on rare diseases because there is a paucity of clinical research on them. Cochrane also has some difficulty doing reviews in oncology because the field changes rapidly. We are working on a systematic analysis of what the gaps in Cochrane reviews are, but don't yet have our findings to present.

If GiveWell were to provide funding to the editor-in-chief's office, it would be possible to distribute funding to support the production of prioritized reviews. There is a recent precedent for doing this; the WHO provided funding centrally which then went toward funding prioritized reviews.

Dissemination

I recently spoke with someone who said that he had made a large expenditure to commission a systematic review on a topic, only to later discover that there was a pre-existing Cochrane review on the same topic which he could have relied on. Cochrane needs to take more steps to identify people who would be interested in the results of reviews and make sure that the information gets to them.

There are a number of efforts in the direction of disseminating Cochrane content. Some of them are:

- ⤴ Improving the language of the reviews, and the number of translations
- ⤴ Making the format of the reviews more accessible and digestible.
- ⤴ Summarizing reviews. Government agencies fund the Norwegian Cochrane group to produce summaries of reviews which are aimed at policy makers in sub-Saharan Africa. It would be great to scale up this sort of work.
- ⤴ Having Cochrane staff advocate for the use of the evidence from Cochrane reviews at health

conferences.

- ⤴ Training the users of research on how to understand and use Cochrane's reviews.

Because reviewers have some understanding of the significance of their findings in the context of public health, there is a need for more communication between review groups and the centers that are involved in disseminating the information in reviews to health professionals. Such communication could be facilitated by central Cochrane activity.

- ⤴ Linking review groups and organizations that make policy guidelines. Cochrane has been working with National Institute for Health and Clinical Excellence (NICE) to develop NICE's guidelines. This involves not only Cochrane informing NICE of the contents of Cochrane reviews, but also Cochrane updating reviews and producing new reviews to meet the needs of guideline makers. With more funding, Cochrane could engage in more activities like this.

Other actors in the systematic review community

There are national bodies such as the National Institute for Health and Clinical Excellence (NICE) which commission systematic reviews; also other groups such as EPPI-Centre, the Campbell Collaboration and others. Private review agencies commission reviews for drug companies. There are fewer organizations that are doing reviews relevant to low and middle income countries.

How Cochrane reviews are used

- ⤴ Cochrane reviews play a big part in informing the development of health guidelines by local, national and international organizations. This has great influence because guidelines are followed by tens of thousands of health professionals.
- ⤴ Policy makers use Cochrane reviews for policy decisions outside of the scope of health guidelines.
- ⤴ Textbooks authors use Cochrane reviews to inform their content.
- ⤴ The Cochrane website is accessed by many medical practitioners and patients. One widely accessed review is on cranberry juice preventing urinary tract infections in women. It seems as though the viewers of this review would be primarily members of the public rather than medical professionals. This suggests that members of the public are using the reviews for their individual treatment decisions.

Cochrane reviews differing from and changing medical practice

- ⤴ Last year a review studying the treatment of hemorrhage by tranexamic acid found that the intervention was under used. Now the treatment is increasingly used widely.
- ⤴ A drug called OKT3 was withdrawn from the marketplace in response to a review by the Cochrane Renal Group.
- ⤴ A Cochrane review found that a drug called erythropoietin was found to be harmful to people with chronic kidney disease and this resulted in the US Food and Drug Administration issuing a black box warning concerning erythropoietin.
- ⤴ Cochrane reviews have found that Interleukin 2 is safer than a competitor drug and this has

influenced people's choice between the two drugs.

- ^ Lots of money has been invested in deworming programs. The recent review on deworming showed that the evidence for the effectiveness of deworming [for soil-transmitted helminths] at improving life outcomes is limited at best.

In general, Cochrane reviews tend to find that the benefits of a medical treatment are smaller than was previously thought and in some cases, that the harms of a medical treatment are greater than was previously thought.

There is no document compiling examples of Cochrane reviews influencing guidelines and practices. The closest document available is an editorial about the use of Cochrane reviews in NICE guidelines (on the Cochrane website). However, while this document gives information on the reviews that the NICE guidelines cite, it doesn't give information on impacts of the reviews on the guidelines. We would like to compile the examples of influence systematically, but do not currently have a way of doing this.

Uniformity of quality of the Cochrane reviews

Cochrane has developed an agreed set of standards for review quality that all Cochrane review groups have committed to. Reviewers have to satisfy a number of criteria in the course of writing their reviews. The standards are probably among the most exacting in the world. There is some inconsistency across review groups concerning whether they've met the standards and one of my roles as editor-in-chief is to reduce this inconsistency. However, I believe that all Cochrane reviews are of very high quality.