

years, outside of *The Cochrane Library*<sup>5</sup> An important limitation of many available systematic reviews of prognosis reflects the early stages of development of this research methodology. Systematic reviewers must choose an approach and methods at each step; however, there is currently limited empirical evidence regarding the most appropriate methods for conducting prognosis systematic reviews, leading to substantial variation in the methods used to conduct them.

**Process of prognosis review exemplars in Cochrane:** The prognosis review exemplar initiative will serve as a useful way to develop and evaluate methodological approaches for synthesizing research in the area of prognosis. Similar to systematic reviews of intervention studies, we consider six key steps to prognosis reviews: (1) defining the review question; (2) identifying studies; (3) selecting studies; (4) critical appraisal of studies; (5) collecting data; and (6) synthesizing and interpreting results. Review teams aim to use best current methods for the prognostic reviews, modified from intervention and diagnostic test accuracy review methods. So far, two of the prognosis review exemplars have successfully registered titles and have completed protocols for approval.

The task of Review Groups involved in this initiative is to ensure suitable topics and methods for publication. Review Group Managing Editors, the editorial teams and members of the Prognosis Methods Group have collaborated to modify the review management process of registering, peer reviewing and publishing. Relevant steps in the process of managing the prognosis review exemplars include the following.

- A Title Registration Form for the prognosis review exemplars was adapted from the form used to

register intervention reviews with the Back Review Group (BRG). Title registration approval from Cochrane BRG Editorial Board was sought. The Board members were familiar with the review team (two are active intervention review authors and Advisory Board members) and were supportive of the new format. Some questions were raised about the review question and proposed methods; however, the title was approved faster than most within the Group.

- Select headings for the new protocol and review format. The prognosis review exemplar author teams are currently working to produce the protocols and reviews in MS Word rather than Review Manager, which means that each team can use unique headings and subheadings. However, there will need to be consistency prior to publication.
- The protocol checklist has been adapted to assess prognosis review methods. The Editorial Resources Committee form was easily adapted for all three types of prognosis reviews. The Review Groups are currently considering selection of peer referees to assess the prognosis protocol and review exemplars. Review Groups expect that peer referees will come from a combination of content experts (from the Review Group Board), methodologists from the Prognosis Methods Group and perhaps invited experts from outside the Collaboration.

**Conclusions:** This prognosis review exemplar initiative will have potential impacts in

the respective topic areas of interest of the reviews, and in developing the methods of prognosis systematic review. Methodological work related to each of the review exemplars will inform future prognostic factor systematic reviews and extend the benefits of well conducted evidence syntheses. An important consideration when producing different types of reviews for *The Cochrane Library* are the efforts and resources required within the Cochrane Review Groups.

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## Informing the politics of prioritizing (and funding) systematic reviews: another potential step for the Agenda and Priority Setting Methods Group

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The review prioritization projects conducted to date within The Cochrane Collaboration have shown that priorities can be set, and the process of setting them evaluated, by applying selected methods of clinical and social science disciplines.<sup>1</sup> In a commentary on a recent series of articles on The Cochrane Collaboration 'review prioritization projects', Bero and Binder concluded that 'a variety of approaches to priority setting are successful'.<sup>2</sup> However, these methods have less often included reviews in the policy sciences, such as economics, history, operations research, political sci-

ence, political sociology and public administration/management. Perhaps as a result of not taking account of these disciplines, the projects have mostly involved systematic reviewers, practitioners and patients; and have engaged less effectively with people in organizations that finance systematic reviews and make policy about whether and, if so, how to use their findings. In most countries, these people are officials of public agencies. In addition to this, some fundamental questions to enhance the use of systematic reviews in informing policy making remain unanswered, e.g. how to evaluate

**Table 1.** Steps before starting a research priority setting exercise.

- (1) Defining the level of research priority setting exercise (Is the priority setting exercise on a national or regional level? Is the exercise focused on a broad health or social care area or a focused disease area?)
- (2) Setting up systems to collect required data to inform research priority setting exercises, e.g. mapping the current research data on burden of disease
- (3) Building the group to establish partnerships with stakeholders, e.g. to communicate and engage with stakeholders to ensure that there is a mutual understanding and trust to participate in the project
- (4) Clarity and transparency on the objectives of the research priority setting exercise
- (5) Estimating available resources and determining the timeline of the project

**Table 2.** Suggested steps for a collaborative project between Cochrane Groups (and/or persons with access to policy makers) for a research priority setting exercise.

- Devise questions –some general, others country-specific –the teams would ask in conversations with persons who are important in making decisions about policy and practice
- Discuss the categories of people with whom to discuss priority setting processes and priorities for systematic reviews (whether, for example, it would be important to talk with leaders of competing political parties and groups that have competing interests in particular countries)
- Select several countries in which to pilot these discussions/conversations
- Review reports from the teams in the piloting countries about their initial conversations and, as a result, revise the list of questions each team will ask
- Discuss reports from each country-team about their conversations in order to separate generalizable and country-specific priorities for reviews
- Discuss the results of conversations in each country about the list of reviews that appear to have cross-national priority
- Discuss the results of conversations with each team's informants about processes for setting key questions for reviews that have country-specific priority as well as those from the cross-national list that have the most appeal
- Draft an article for publication about the general and country-specific findings of the project
- Discuss and incorporate comments on the draft article from members of the country-teams as well as from the persons in each country with whom they talked about priorities (having assured policy makers that the revised article will take account of their comments but not necessarily change the teams' conclusions)

and use evidence about the incidence, prevalence, cost and salience in public opinion of particular conditions in negotiations about which reviews to prioritize and subsidized. Also what the characteristics of effective, ineffective, and erratically effective processes of negotiation are that precede prioritization (for instance, the roles of diverse professional, commercial and advocacy interest groups and of the media of communication). Several case examples show that certain aspects of the context in which research is prioritized, like politics and advocacy, and the research infrastructure<sup>3,4</sup> can have a major influence on what research gets or does not get funded or prioritized.

The Cochrane Agenda and Priority Setting Methods Group is working on bringing together the current empirical studies on research priority setting methods and developing methods guidance for Cochrane groups. Before making a selection of the methods for prioritization, preparation of the context and engagement of people in the process is required. An overview of steps for this engagement is presented in Table 1. Details are provided in the first guidance document on research priority setting, available on the Cochrane Agenda and Priority Setting Methods Group website ([capsmg.cochrane.org](http://capsmg.cochrane.org)). Priority setting is a political process. Like other such processes, it can take more

or less account of the best available evidence about the determinants of health and the effects of interventions to address them. These generalizations apply to both priority setting in every country and its sub-jurisdictions and to priority setting in research and funding organizations. By political process, we mean that priorities for systematic reviews are determined, like other decisions about allocating scarce resources, by who does what, with, for (and, sadly, sometimes to) whom, how, in order to determine who gets what.<sup>5-7</sup> A notable example is that for most of the past century laboratory research has had priority in funding over population-based research, despite considerable evidence of the importance of research on populations for addressing the causes and consequences of illness.

The Methods Group partnered with the James Lind Alliance to identify, engage and build partnerships with clinicians and the public. Our first set of empirical research projects used methods to test hypotheses and seek congruity between theory and models used predominantly in health and social sciences. However, these methods did not enable us to explore how social and political context informs research agendas over time. Therefore, we intend to broaden our perspective by using methods and techniques developed in the disciplines of the policy sciences and by professionals in politics to work collaboratively with policy makers and their staff to set priorities for systematic reviews. These approaches allow a narrative to be derived for each country and sub-jurisdiction that provides a persuasive plan for priority setting. The plan in each country or a sub-jurisdiction of it would take account of a variety of factors including, but not limited to, epidemiology, public preferences, ideology and partisan politics. These methods will prioritize history and contingency over formal theory and models in order to develop a coherent narrative of events and explanations that are grounded in a critical analysis of documents, interviews and observations.<sup>8</sup> We have begun by engaging with funders in the UK (NETSCC, NICE and the Association of Medical Research Charities) to work together on the possibility of conducting a systematic review on research priority setting methods. In the future, we intend to begin a broader project working with teams composed of Cochrane Review authors and people experienced

in the politics of policy making in selected countries and, where appropriate, their sub-jurisdictions (Table 2 provides an overview of the steps that we expect to take in this project). Over the next year, we aim to identify systematic reviewers and policy makers to participate in this project in Africa, Asia, Europe and North America.

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## Challenges in conducting priority setting exercises for Cochrane entities

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**Date of study:** 2012.

**Objective:** To identify the problems and challenges that Cochrane entities face when conducting priority setting exercises.

**Location:** The Cochrane Collaboration.

**Introduction:** A survey in 2008 (updated in 2010) demonstrated that Cochrane Review Groups (CRGs) used a wide variety of methods to prioritize topics for their systematic reviews.<sup>1</sup> Currently, the Cochrane Agenda and Priority Setting Methods Group (CAPSMG) is focusing on evaluating the current empirical evidence on the methods that can be used for effective research priority setting exercises. Unlike methods used to conduct systematic reviews, research priority setting exercises are strongly influenced by the political, social and organizational infrastructure in which they are conducted.<sup>2,3</sup> Therefore, we are also focusing on collecting data on the context in which Cochrane Reviews are prioritized and conducted. We are collecting data and information that could inform the selection of effective research priority setting methods for topics of Cochrane Reviews. As part of this overall aim, this summary presents the results of a

small web-based survey carried out by the CAPSMG, exploring the challenges faced by Cochrane entities when prioritizing research.

**Methods:** In 2012, the CAPSMG sent an email to the entity lists of CRGs, Centre, Fields and Methods Groups and invited them to provide a description of their most recent priority setting exercises and, in order of importance, the three most important challenges that they encountered in conducting these exercises. A link to the survey available on the CAPSMG web page was embedded in the email. They were asked to provide their name, email address, telephone number, postal address and name of the Cochrane entity to which they contribute. The data were analysed thematically to identify the main areas in which the Cochrane entities encounter challenges in conducting priority setting exercises.

**Summary of main results:** In 2012, only 13 entities responded (nine CRGs, two Centres, one Field and one Methods Group). All undertook research prioritization exercises, including interviews to consensus, group work, conferences, meetings, briefings, expert panel and survey. Four broad themes emerged across the majority of the data illustrating the challenges reported:

- (i) Balancing workload and allocating adequate time to conduct or implement priority setting exercises
- (ii) Resource allocation
- (iii) Translating priorities into research questions appropriate for a Cochrane Review
- (iv) Engaging with stakeholders

The most commonly reported challenge in conducting priority setting exercises is stakeholder engagement. These

challenges related to understanding the concept of research prioritization-learning needs, involving a range of stakeholders equally, the composition of stakeholder groups and maintaining engagement.

Table 1 suggests that challenges which arise from managing workload, allocating resources and ensuring the continuity of priority setting exercises have potential remedies located within organizational and procedural processes. Stakeholder engagement, composition, equality, retention and skills rely on the resources that people bring as individuals. Correspondingly, the quality of the evidence, prioritization of topics, research question formulation, and study design are amenable to clear methodological processes. Each of these resources and processes arguably interleave to produce transparent prioritization. The task now is to consider what changes can be engaged and tested as we move towards identifying strategies to help entities overcome or manage these challenges as they seek to prioritize research topics in a transparent way.

**Methodological reflections:** Our email survey of Cochrane entities sought to understand the challenges encountered by people conducting research prioritization. Possible advantages of using the internet to conduct surveys include cost savings by eliminating the printing and mailing of survey instruments; the speed with which a large sample can be targeted; and the security of responses through, for example, password protection. Nevertheless, issues concerning representation and bias still apply. Response rates in this study were low and we tried to improve the response rate by reminders<sup>4,5</sup> and personalized