

# ***Proposal for process of determining projects for ‘Methods Innovation Funding’***

Document submitted to the Cochrane Collaboration Steering Group.

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## **Purpose of paper**

To propose a process for determining a five year programme of costed, prioritised methods innovation and development projects, tied to implementation and improvements in the quality of Cochrane reviews (of diagnostic test accuracy, intervention and methodology, and overviews) or Cochrane processes (editorial or otherwise).

## **Urgency**

High.

## **Access**

Open.

## **Background**

In April 2010, the Cochrane Collaboration Steering Group (CCSG) invited the Methods Board to submit a proposal for a programme of methods-related work. This would be considered for central funding by The Cochrane Collaboration, through a stream referred to in this document as ‘Methods Innovation Funding’. The programme is intended to provide a strategic approach to supporting methods-related initiatives, addressing priorities of the Collaboration. The Opportunities Fund has previously funded such projects but, with the closure of that Fund, it was recognised that an alternative for methods-related work might provide a more focused means to improve the quality of Cochrane reviews. The amount of funding available for this initiative has not been decided by CCSG. The Opportunities Fund and its predecessor provided approximately £75,000 per annum to methods-related projects.

Although broad priorities of the Collaboration were included in the calls for proposals for the Opportunities Fund, it operated as a *responsive* mechanism for funding. The array of funded projects was dependent on what was submitted, and there was no attempt to identify in advance those specific areas most in need of attention, or to elicit applications to meet identified priorities. The Methods Innovation Funding programme would take a different approach in order to encourage applications that target priority topics. This requires a mechanism to ensure that high-quality projects meeting specific priorities of the Collaboration are identified and supported, in order to make optimum use of limited resources. This paper proposes a mechanism to achieve this. At the same time, it will be important to maintain sufficient flexibility to allow novel and innovative ideas to be submitted; but these are likely to receive the minority of the funding awarded.

Processes to identify priorities for funding must engage many different parts of the Collaboration and not just the Methods Groups. For example, input from the Cochrane Editorial Unit and the Cochrane Review Groups will be key. These are both represented, alongside methodologists, on the Methods Application and Review Standards (MARS) Working Group; hence the proposal that MARS be asked to take the lead on implementing this proposal.

The proposal below is for single implementation of a funding mechanism. However, since priorities change and methods are continually developing, we envisage a second implementation after two or three years, depending in part on the response to the initial round.

## Proposal and discussion

### Scope of the programme

Like the Opportunities Fund, the Methods Innovation Funding will support a series of specific projects, each with agreed aims, outputs, timelines and budgets. Funded projects should have one or more of the following aims:

1. To develop, update or evaluate methods relevant to the production of high-quality Cochrane reviews. For projects with this aim, there must be a focus on producing guidance for inclusion in the *Interventions Handbook*, the *DTA Handbook* or the *Policy Manual*, and a detailed consideration of strategies for implementation of any proposed novel or amended methods.
2. To measure the methodological quality of existing Cochrane reviews. Methodological quality is interpreted here as assurance that the review reaches and communicates conclusions that truly reflect the empirical evidence on which such conclusions should be based, given the objectives of the review. For projects with this aim, there must be a focus on the implications of the project's findings for improving Cochrane reviews in the future.
3. To develop, or evaluate the effects of, methods intended to improve the methodological quality of Cochrane reviews or the quality or efficiency of Cochrane processes (editorial or otherwise).
4. To make a substantive improvement in the quality or efficiency of Cochrane reviews or Cochrane processes by implementing existing methodological guidance.
5. To enhance the infrastructures of the Collaboration in ways that will improve the methodological quality of Cochrane reviews.

The programme covers Cochrane reviews of diagnostic test accuracy, intervention and methodology, as well as Cochrane overviews of reviews. Projects may be classified as short-term (to be completed within one year), medium term (to be completed within three years) or long term (to be completed within five years).

### Overview of the process

The process of identifying projects to recommend for funding will be divided into two phases. The first phase is a collation of priority areas (involving Collaboration-wide consultation), followed by the prioritisation of the project areas identified (involving the entity executives). The second phase is the elicitation of funding applications for specific projects to address the identified priority areas (including directly-elicited applications from Methods Groups and an open call), followed by the evaluation of applications against the priority project areas and formulation of recommendations for funding.

### Phase 1(a): Collation of priority areas

The following sources of ideas and information would be used to identify suggestions for priority areas:

- Cochrane Methods Board
- Editor in Chief and Cochrane Editorial Unit
- MARS Working Group
- Published papers and conference presentations that have identified limitations or errors in Cochrane reviews or have assessed their quality
- Working Groups on methodological standards (being formed in September/October 2010)
- Diagnostic Test Accuracy Reviews Working Group
- Updating Reviews Working Group

- Methodology Review Group, including an audit of the Implications for research from Cochrane Methodology Reviews
- Cochrane Review Groups (ideally through the networks of CRG-based methods people where these exist)
- The *Handbook* editors' responses to the January 2010 survey of Cochrane Review Groups
- Recommendations from the dissolved Quality Advisory Group

In seeking input from these sources, each would be asked to focus on the five aims set out above, and would be prompted to consider issues such as the main areas of uncertainty (currently and expected) about the methods used to conduct Cochrane reviews (including areas of disagreement), the main methodological problems in Cochrane reviews, and processes that are obstacles to the preparation and maintenance of reviews of high methodological quality.

The MARS Working Group will prepare a call for submission of project areas, after considering how much information will be needed for each. Project areas will focus on things that need to be achieved, rather than on the mechanics for achieving them. The MARS Working Group will then act as a prioritisation committee (individual members may be substituted as members of this committee if they are unable to dedicate the time required).

### **Phase 1(b): Classification of project areas**

The prioritisation committee will divide the project areas identified in phase 1a into four categories of priority (see below). This will be informed by the views of Methods Groups, Review Groups, Centres and Branches, Fields and the Editorial Unit. These views are likely to be gathered through the entity executives.

#### *A: Essential project areas*

Areas of fundamental and urgent importance to the Collaboration, such that extensive efforts should be made to attract fundable proposals in advance of the call for proposals.

#### *B. High priority project areas*

Areas regarded as important to the Collaboration, but which may be pursued only if a high quality application is received in response to the call for proposals or where a submitted proposal could be improved through discussion.

#### *C. Desirable project areas*

Areas regarded as worthy of funding but only if a high quality application is received in response to the call for proposals, and if sufficient funding remains following the acceptance of projects of a higher priority.

#### *D. Other project areas*

Areas that are considered to be of low priority or unnecessary to the Collaboration. These areas will not be included in the call for proposals.

### **Phase 2(a): Elicitation of project proposals**

#### *A: Essential project areas*

When an essential project falls within the remits of existing Methods Groups (or the Methodology Review Group), the relevant entity or entities will be contacted before the announcement of the call for proposals. The committee will engage in discussion with them, offering the entities the opportunity to commit to doing a suitable project (or to finding members who will commit to this), which they will do by submitting an outline proposal to the prioritisation committee. The topic areas for essential projects that will be undertaken by Methods Groups (i.e. which are the topic of an

outline proposal) will not be included in the call for proposals. However, the invited full project proposals would need to be submitted alongside the competitive submissions in other topic areas. The invited proposals will be recommended for funding if they demonstrate that they represent value for money and will address the objectives of the essential project. There is no guarantee that the projects will be funded; for example, the CCSG may consider the costs to be too high. Essential project areas that cannot be undertaken by Methods Groups will be included in the call for proposals, and will be highlighted as topic areas that are the most likely to be funded.

### *B. High priority project areas*

High priority projects will be subject to open competition. For projects that fall within the remits of existing entities, applicants will be encouraged to seek the formal endorsement of the entity leaders. Applications with endorsements of entity leaders may be given priority over others, if they are rated as of similar quality. Applicants whose proposals fall short of the standard needed for funding, but which the selection committee feel might become suitable with modification, will be given feedback and the opportunity to submit a revised proposal within a short period of time.

### *C. Desirable project areas*

Desirable projects will be subject to open competition. For projects that fall within the remits of existing entities, applicants will be encouraged to seek the formal endorsement of the entity leaders. Applications with endorsements of entity leaders may be given priority over others, if they are rated as of similar quality.

## **Phase 2(b): Call for proposals**

The call for proposals will be distributed to the Methods Groups, the Methodology Review Group and the Working Groups on methodological standards, and advertised throughout The Cochrane Collaboration. It will follow the model of the call for proposals for the Opportunities Fund, subject to the changes needed to identify the priority topics and their categorisation as set out above. Proposals will need to ensure that any implications for further work at the end of the proposed project are noted (e.g. for implementation of new methods in RevMan). Projects may be classified as short-term (to be completed within one year), medium term (to be completed within three years) or long term (to be completed within five years), although proposals for projects of any length up to a maximum of five years will be invited.

## **Phase 2(c): Evaluation of proposals**

A selection committee to be established by the MARS Working Group will evaluate each project proposal, taking into account (i) relevance to the priority project areas; (ii) quality of methodology; (iii) whether outcomes are identified and achievable; (iv) whether the group has the necessary skills and experience to achieve stated outcomes (including whether appropriate collaboration with relevant entities and third parties is proposed); and (v) whether the proposed budget is sufficient and well thought-out. Expert assessments will be sought for projects lying outside the methodological expertise of the selection committee.

Applications that do not fall within the scope of identified priority areas will be considered alongside projects submitted within category C.

The selection committee will formulate recommendations to the CCSG. Among these recommendations will be a consideration of timing. For instance, if many short-term projects are submitted, the committee may propose a delayed start to one or more of them. Members of the prioritisation committee who are not on the selection committee may be consulted if uncertainties arise over which projects to undertake first. The committee should bear in mind that a repeat of the whole funding process may be undertaken after two or three years, so committing considerable resources to long term projects may not be appropriate. When preparing their recommendations to CCSG, the committee will include the implications of any projects for future resource use (e.g.

development of new methods that might need to be implemented in RevMan), and estimates of such future resource requirements may be factored into the proposals to CCSG.

## **Oversight of the programme**

The programme will be overseen by the MARS Working Group, which includes perspectives of Methods Groups, Co-ordinating Editors and the Cochrane Editorial Unit, and benefits from the additional input of the Information Management System Team, the Training Working Group and the Managing Editors. MARS should work closely with the group exploring the possibility of a new Methods Group on priority setting. Once the Methods Coordinator is in post, he or she will be expected to have a major role in the process.

A prioritisation committee will oversee phases 1a and 1b, and a selection committee will oversee phases 2b and 2c. The prioritisation committee will place an emphasis on identifying the needs of the Collaboration, while the selection committee will be constituted to place an emphasis on assessing the quality of project proposals. Considerable overlap will be desirable, and it is envisaged that a single committee will evolve over time, with all members simultaneously being active on the committee during the transition (phase 2a).

### *Prioritisation committee*

- Starting out as the MARS Working Group, with the possibility that some individuals will be substituted with others with a similar perspective.
- Responsible for issuing and administering the consultation to identify priority project areas.
- Responsible for categorising project areas by priority.
- Jointly responsible (with the selection committee) for liaising with existing entities about doing projects in essential project areas.

### *Selection committee*

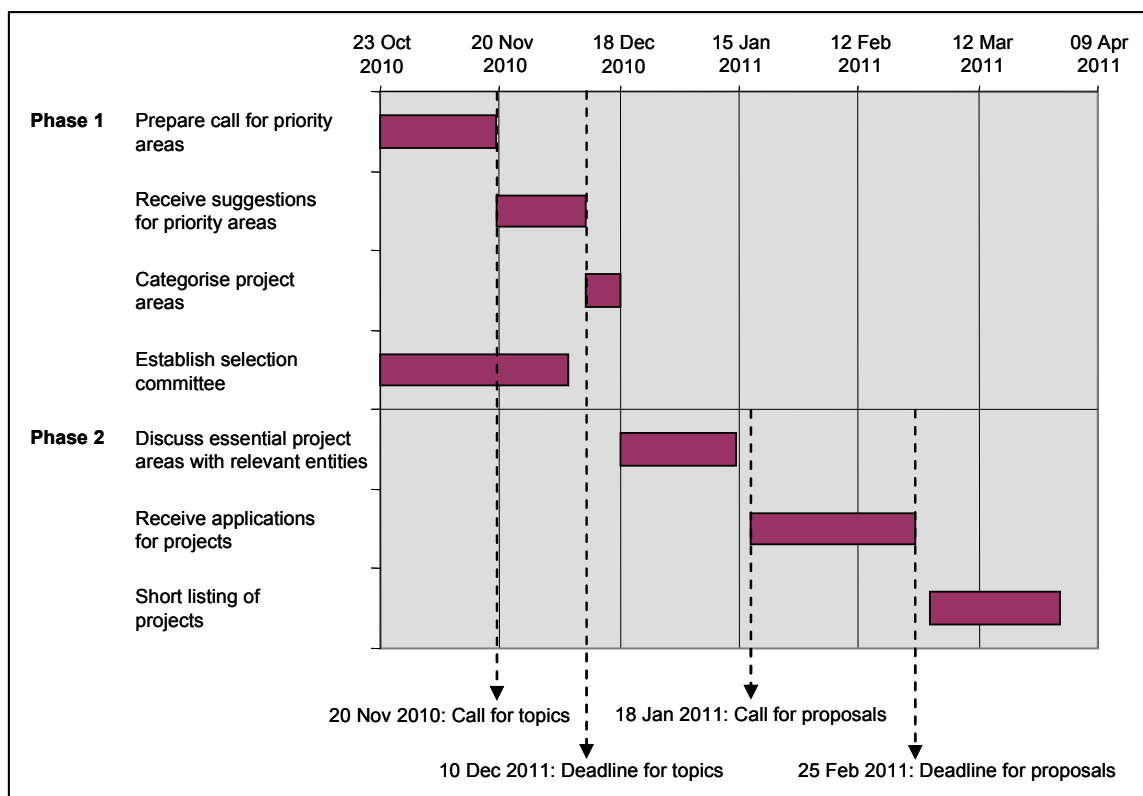
- Convened by early December 2010.
- Jointly responsible (with the prioritisation committee) for liaising with existing entities about doing projects in essential project areas.
- Responsible for issuing and administering the call for project proposals.
- Responsible for short listing projects and formulating recommendations to CCSG.

## **Time lines**

### *Important dates*

- Approval by the Steering Group: 23 October 2010
- Development of call for priority topic areas by the MARS Working Group: by 19 November 2010
- Call for priority topics issued: 20 November 2010
- Selection committee established by the MARS Working Group: by 6 December 2010
- Deadline for submission of priority topics: 10 December 2010
- Topics categorised into priority areas: by 18 December 2010
- Discussions with relevant Cochrane entities about Essential priority topics: by 14 January 2011
- Call for proposals issued: 18 January 2011
- Deadline for proposals: 25 February 2011
- Short listing of proposals: during March 2011
- Recommendations presented to Steering Group: 2 April 2011

The following chart illustrates the time lines for the full process.



## Summary of recommendations

We recommend that the CCSG approve the proposal described in this paper.

## Resource implications

The paper is built on the assumption that the CCSG will be in a position to award Methods Innovation Funding at its meeting in Split in March-April 2011. The resource implications are unknown at this stage, but requests are estimated to be in the region of £100,000 per annum.

## Impact statement

A priority-driven, consultative and fair approach to determining funding for methods innovation will facilitate important improvements in the methodological quality of Cochrane reviews and processes.

## Decision required of the Steering Group

1. The CCSG is asked to approve the process described above, or to offer suggestions for how it should be amended.
2. The CCSG is asked to provide clarification on the amount of funding that is likely to be available, to help potential applicants decide whether to invest time in preparing submissions.