Overview of Methods Implementation Projects in the Content Strategy
Methods projects overview

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Date: March 2019

1.1 Introduction

In April 2018, the Cochrane Governing Board approved the Content Strategy plan and budget. In this paper we describe progress against the 2019 objectives for the six methods implementation priorities detailed in the Content Strategy.

1.2 Purpose

Our vision is that Cochrane will be positioned to adapt rapidly, efficiently and consistently to the changing needs of health care decision makers.

Our mission is to create an effective and efficient road map that can be used to introduce changes and enhancements that increase Cochrane’s capability and capacity to meet the needs of decision makers consistently.

1.3 Governance and accountability

The Editor in Chief (EIC) is the sponsor the programme of works that together comprise the implementation plan. (S)He will be assisted by the Project Team, which includes the following:

- Ella Flemyng, Methods Implementation Coordinator
- Toby Lasserson, Senior Editor, EMD Methods and Review Quality Unit
- Tari Turner, Cochrane Australia, Programme Manager

1.4 Key target areas for implementation

The following highest priority methods were previously identified for implementation in 2019 and are listed in order of urgency. The Project Manager for each is also included:

- Risk of Bias 2 tool (Planning for implementation) – Ella Flemyng
- Living Systematic Review (Planning for implementation) – Tari Turner
- Network meta-analysis (Planning for implementation) – Ella Flemyng
- Rapid Reviews (Proposal and rationale) – Ella Flemyng
- Reviews of prognosis studies (Implementation) – Ella Flemyng
- Use of Clinical Study Reports as the data source for drug implementation reviews (Proof of concept) – Ella Flemyng

For each of these we are developing detailed implementation plans for 2019 and beyond, following the creation of an implementation plan template in February 2019. These implementation plans are also project overview documents that will develop as the project develops. The Risk of Bias 2 implementation plan has been included as an example, for reference.
Risk of Bias 2 tool for randomised studies included in intervention reviews

Stage: 4. Planning for implementation
Importance: High
Urgency: High
Core project team: Ella Flemyng, Toby Lasserson, Julian Higgins
Strategy to 2020 target in 2019? Yes

Impact:
This project aims to develop a clear and streamlined process for authors, editors and other users to conduct or assess risk of bias in intervention reviews using the RoNetB 2 tool. The use of RoB 2 will result in Cochrane Reviews that have more reliable risk of bias assessments, providing more concrete conclusions on the reliability of the evidence, and ultimately contributing to making health decisions more informed.

Success criterion:
Implementation of Risk of Bias 2 (RoB 2) in all new Cochrane Intervention Reviews that include randomized controlled trials initiated from 1 January 2020. Whilst it is highly desirable for updates that are started after this date to adopt the new method, there will be no requirement to apply RoB 2 retrospectively in published reviews.

Recent progress
- A detailed implementation plan has been developed for the project (included alongside this report).
- Guidance - the new Cochrane Handbook detailed RoB 2 methods (drafts currently available. It is currently available online for personal use of Cochrane members, and will be published by Wiley in the late summer 2019). Cochrane training has been updated to reflect the new tool. MECIR guidance has been updated.
- Technological setup – the RevMan Web Practice Platform now allows users to practice RoB 2 input and a ‘how-to’ guide for this has been developed. We are also able to switch RoB 2 on for new Reviews on RevMan Web platform.
- We are running a strategic session at the mid-year Governance Meetings on RoB 2. This will include practical ‘how-to’ guidance in RevMan Web and using revised data extraction forms. The session will also be used to call for feedback on usability and priority areas for development or guidance.
- We have confirmed a three-day Methods Training event in Bristol (July 2019) dedicated to RoB 2. All CRGs have been invited to send one representative who will facilitate RoB 2 implementation in their CRG. Spaces have also been reserved for Network Editors (Seniors and Associates).

Future plans (next 12 months maximum):
- We will set up a cross-CET Technical Advisory Group for Methods Implementation (relevant to all methods implementation but will be dominated by RoB 2 to begin) – core planning group will have representative from the Methods Team, ITS, Cochrane Library, Editorial and Policy, and Training. Plans for this to be a discussion-based, periodic meeting with key stakeholders invited to help identify and overcome methods implementation challenges.
- We are currently developing a revised version of the data extraction form to facilitate RoB 2 assessments for authors and will develop a comprehensive ‘how-to’ guide for authors.
- The MLS team hope to run virtual training and will update their Standard Author Training Materials.
- The Bias Methods Group have submitted a special session proposal for the Colloquium and are considering other workshops submissions too.
- We aim to pilot and support the conduct of RoB 2 in at least three Reviews, which could become exemplars, and ensure the process is streamlined and efficient.
- We aim to obtain feedback from the CRGs, Network Editors, Fields and Centres on what would be most useful to them to support the implementation planning by combining requests for feedback with requests for the new Handbook (likely via SurveyMonkey).
- Once processes and guidance have been developed for RoB 2, we will discuss with relevant parties implementing policies within Cochrane relating to RoB 2 use.

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• We will work with the Community Support Service, Methods Support Unit and other key groups to define the escalation process for queries or issues with RoB 2 use and develop default responses for common queries.

Issues and Challenges:
• Confirming how RoB 2 output will be presented in the Cochrane Library has proved challenging, given system restraints for output. We are discussing this with the Project Team, Cochrane Library and UX Teams to agree a solution.
• Data formats and migration between systems requires updates from the different platforms (Covidence, EPPI-Reviewer, GRADEPro). These discussions have begun; Covidence may prove challenging due to the changes in data extraction for RoB 2. EPPI-Reviewer may not complete any updates, and the GRADEPro team has said that they are willing to discuss what updates may be needed.
• Creating a streamlined process between systems and for authors is heavily reliant on the new study centric data structure project in RevMan Web.

Living Systematic Reviews

Stage: 4. Planning for implementation
Importance: High
Urgency: High / moderate
Core project team: Tari Turner, Julian Elliot, Joanne Brooker
Strategy to 2020 target in 2019? Yes

Impact:
The impact of this project would be that Editors and authors have a clear and streamlined process for conducting a Living Review if their Review meets certain pre-determined criteria. The pre-determined criteria include:
• evidence that is judged to have potential for high health impact
• current evidence suggests important uncertainty
• there is a high likelihood of emerging evidence that may change practice or policy
• review is likely to be used to inform ‘living’ guidelines.

Success criterion:
Living Systematic Reviews identified and initiated across all Networks by end 2019.

Recent progress:
• Evaluation of pilot LSRs finalised, manuscript for publication in preparation.
• Webinar on LNMA on March 21.
• Living Evidence Network approaching 250 members.

Future plans (next 12 months maximum):
• Release revised guidance for Cochrane LSRs.
• Support LSRs in all networks.
• Webinars on tech enablers and publication processes.
• Manuscripts on key elements of LSR methods.
• The following are being submitted or organised at the Cochrane Colloquium 2019:
  o oral abstract on the updated LSR guidance document;
  o workshop on the fundamentals of LSRs, with a focus on the updated guidance and evidence surveillance;
  o half-day meeting of the Living Evidence Network.

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Issues and Challenges:
- Many Cochrane teams are considering LSRs and we aren’t always aware of new LSRs, so can’t support as effectively as we would like. Aiming to address this in the first instance by building connections with MEs to ensure they know how to get support.

Network meta-analysis (NMA)

Stage: 4. Planning for Implementation
Importance: High
Urgency: High / moderate
Core project team: Julian Higgins, Tianjing Li, Deborah Caldwell, Georgia Salanti, Ella Flemyng, Toby Lasserson,
Strategy to 2020 target in 2019? Yes

Impact:
The impact of this project would be for Cochrane will be able to scale-up the use of network meta-analysis in order to provide multiple intervention comparisons within Cochrane Reviews that are methodologically more coherent, as well as being more applicable and intuitive to the end users.

Success criterion:
Network meta-analysis scaled up and efficiently conducted according to new guidance and standards across all Networks by the end of 2019.

Recent progress:
- A detailed implementation plan is being developed for the project (waiting on project funding request from the external researchers for the project before we can finalise).
- Cochrane Interactive Learning Module on NMA has been released.
- New Cochrane Handbook includes a chapter on NMA.

Future plans (next 12 months maximum):
- Agree methodological standards for NMA via an in-person consultation meeting.
- Develop a network of NMA experts to support CRGs in NMA (to potentially be authors, peer reviewers or advisors) – will include recruitment, managements and process to be determined.
- Develop NMA tools and confirm which Cochrane endorses for use by author teams, alongside any relevant guidance for the tool(s).
- MLS Training will coordinate updates to Standard Author Training Materials.
- The Comparing Multiple Interventions Methods Group have submitted a special session proposal for the 2019 Colloquium.
- Work with the Community Support Service, Methods Support Unit and other key groups to define the escalation process for queries or issues with NMA use and develop default responses for common queries.
- Confirm how NMA will be supported in RevMan Web, RevMan 5 and publish in the Cochrane Library, and confirm how data will efficiently feed between the necessary systems involved in the whole process (ensure involvement in the new study centric data discussions).

Issues and Challenges:
- None at this point – waiting on the final proposal and funding request from the external researchers before we begin next steps.

Rapid Reviews

Trusted evidence.
Informed decisions.
Better health.
Content Strategy Implementation Plan

Stage: 1. Proposal and rationale
Importance: Moderate
Urgency: Moderate
Core project team: Chantelle Garrity, Barbara Nussbaumer-Streit, Ella Flemyng
Strategy to 2020 target in 2019? Yes

Impact:
The impact of this project will be to determine the desirability and feasibility of producing rapid reviews in Cochrane, and make a decision on whether or not to proceed further towards implementation. Rapid reviews could have potential impacts to reputation, sustainability, and perceived value to decision makers, which would all need to be considered.

Success criteria:
Define a Cochrane Rapid Review, conduct methods research on vital points concerning the validity of rapid reviews, and determine the utility of rapid reviews in Cochrane for consideration by the Governing Board.

Recent progress:
- Identified existing definitions & abbreviated methods employed to better understand the landscape of rapid reviews to inform discussions.
- Catalogued rapid reviews methods research and prioritizing future areas for development (two research projects identified as gaps in knowledge underway and estimated to complete in June 2019).

Future plans (next 12 months maximum):
- Develop a consensus-based (interim) definition of RR specific for Cochrane.
- Determine the impact of key abbreviations throughout the review process and summary of rapid review shortcuts to determine which can and can't be used.
- Assessing the strengths and weaknesses of adopting RRs across Cochrane.
- Compile a broader list of individuals from key Cochrane entities as part of a consultation phase.
- Identify barriers and facilitators to implementation of Cochrane rapid reviews.
- Put together a proposal for the Governing Board to consider rapid reviews in Cochrane for 2019 Colloquium, if applicable

Issues and Challenges:
- An in-person stakeholder consultation meeting to discuss the feasibility of rapid reviews was previously scheduled for March 2019 (in Krakow) but as the projects are not yet completed we will not be able to have these discussions. We are now considering the feasibility of this meeting at the Cochrane Colloquium 2019.

Prognosis Reviews

Stage: 4. Implementation
Importance: Moderate
Urgency: Moderate
Core project team: Carl Moons, Lotty Hooft, Anneke Damen, Ella Flemyng, Toby Lasserson
Strategy to 2020 target in 2019? No

Impact:
The impact of this project will the ability to scale-up the capacity and capability of Cochrane Review Groups and Networks to conduct prognosis reviews, and that authors and editors have a clear understanding of what’s involved, how to assess or develop the methods, and where to go for help and guidance.

Success criteria:
- Trusted evidence.
- Informed decisions.
- Better health.
Content Strategy Implementation Plan

Publication of at least six Prognosis Review exemplars and development of a streamlined process for CRGs to engage with the Prognosis Methods Group during the conduct of a prognosis review for help and support.

Recent progress:
- Templates for registering a title, writing a protocol and the full review are finalized and available via the PMG website.
- A variety of tools and guidance have been developed and are available via the PMG website: QUIPS and PROBAST (ROB tools); CHARMS (checklist for designing a review); TRIPOD (reporting guidelines); competency list for review author team has been developed.
- Developed a network of prognosis review experts to support CRGs in prognosis reviews (who help as authors, peer reviewers and advisors).
- PMG involvement in the initiation of 21 exemplar reviews ensure prognosis reviews of best practice and the process is used as training for the CRG members involved.
- Guidance for grading the quality of underlying evidence of systematic reviews of prognosis studies, including overall prognosis (defined), prognostic factor studies (underway), and prognostic models (underway).

Future plans (next 12 months maximum):
- Agree methodological standards for prognosis reviews.
- MLS Training are considering training options for CRGs and authors, including in-person training in 2019/2020, online e-learning materials and SATMs.
- Prognosis Handbook proposal is under development.
- The Prognosis Methods Group have submitted a special session proposal for the Colloquium.
- Work with the Community Support Service, Methods Support Unit and other key groups to define the escalation process for queries or issues with prognosis reviews use and develop default responses for common queries.
- Confirm how Prognosis Reviews will be supported in RevMan Web and confirm how data will efficiently feed between the necessary systems involved in the whole process (request involvement in the new study centric data discussions).

Issues and Challenges:
- None at present.

Clinical Study Reports as the main data source for drug intervention reviews

Stage: 2. Proof of concept
Importance: High
Urgency: High / moderate
Core project team: Ella Flemyn, Toby Lasserson
Strategy to 2020 target in 2019? Yes

Impact:
The impact of this project will be the development of consensus on when and how to use CSRs in Cochrane Reviews, which will be particularly important for reviews of drug therapies where there is a high risk of reporting bias. In such cases the use of these CSRs will result in Cochrane Reviews that are more transparent, of higher-quality and more likely to provide reliable information to guide health decisions.

Success:
Hold a consultation meeting to discuss the feasibility of using Clinical Study Report as the main source of data in Cochrane drug intervention reviews. If agreed, three exemplar reviews should be initiated before the end of 2019.

Recent progress:

Trusted evidence.
Informed decisions.
Better health.
• Core planning group identified and includes David Tovey, Nicole Skoetz, Joerg Meerpohl, Lesley Stewart, Rachel Churchill, Toby Lasserson, Kerry Dwan and Ella Flemyng. Agenda and speakers to be discussed.
• Meeting delegates have been invited.
• Meeting confirmed for 16 May 2019 in London and venue is meeting.

Future plans (next 12 months maximum):
• Agenda and speakers for the consultation need to be finalised.
• Following the consultation meeting, if deemed feasible, an implementation plan will be developed to support the initiation of at least three exemplar reviews using CSRs.
• Review and revise the 2013 Access to Data Statement in light of the outcome of this meeting and the project generally

Issues and Challenges:
• None at present.