

### Cochrane Eyes and Vision (CEV)

# Interactive Roadmap to completing a Cochrane systematic review



#### Welcome to CEV

This interactive roadmap provides a step by step reference for completing a review with <u>CEV</u>.

Our <u>editorial team</u> is available to assist authors at every stage of the review process. <u>Ms. Anupa Shah</u>, the CEV Managing Editor, maintains communication between the editorial team, authors, and other group members.

Members in the United States are additionally supported by our satellite team, the <u>CEV US Satellite (CEV@US)</u>.

There also is a <u>CEV DTA Satellite</u>, which provides editorial and methodological support for systematic reviews of diagnostic test accuracy (DTA).

#### The Cochrane Systematic Review Process

- Review proposal
- Title registration
- Protocol preparation
- Editorial and peer review of the protocol
- Publication of the protocol
- Systematic review preparation
- Editorial and peer review of the systematic review
- Publication of the systematic review
- Updating the systematic review

#### Preparing to do a Cochrane Review

Things to consider before undertaking a Cochrane review:

**Time**: It takes about 18 months to complete the steps in the systematic review process.

**Topic**: Consider what area interests you and what question you would like to answer. Check current reviews and consult with CEV to ensure that your topic is not already registered.

Click here to view the list of current CEV review titles

We recommend familiarizing yourself with <u>The Cochrane Handbook</u> for <u>Systematic Reviews of Interventions</u> (updated March 2011)

#### **Topics for Cochrane Reviews**

- Cochrane reviews focus on evidence from randomized controlled trials (RCTs) and quasi-randomized controlled trials (CCTs)
- Begin by creating a PICO outline for your topic.
  - P: Participants (include population/condition of interest)
  - Intervention(s) of interest
  - **C**: Comparison(s) of interest (e.g., placebo)
  - O: Outcome(s) of interest (e.g., visual acuity at 12 months)

#### **Building Your Review Team**

**Co-authors**: At least one co-author is needed to assist with the review. The co-author duplicates the main steps of the review process. All authors are expected to contribute to the review.

**Statistician**: It is mandatory that the review team have a statistician as a co-author.

- There must be at least one person on the review team with:
  - Content expertise
  - Methodological expertise
  - Statistical expertise
- CEV can assist with identifying co-authors if needed

#### **Review Proposal Process**

Once you have decided on a review topic, you should contact Ms. Anupa Shah with your interest in initiating a Cochrane review.

If your topic is approved, you will be asked to complete a <u>Review Proposal Form</u>. Note that there are two Review Proposal Forms, one for reviews of Treatment Interventions and one for reviews of Diagnostic Test Accuracy (DTA).

We recommend consulting Chapters 4 and 5 of the <u>Cochrane</u> <u>Handbook</u>.



The CEV editorial team will review your proposal and either approve your proposed review topic, respond with comments, or reject your proposal with reasons.

#### Title Registration

- Once your title is approved by the CEV editors, we will register
  your title in *Archie*. <u>Archie</u> is Cochrane's central server and review
  management system.
- CEV will set up an *Archie* user account for all review authors. The *Archie* server will send a welcome email with further instructions on activating your user account. There also is a <u>Quick start guide</u> to *Archie* for authors.
- All authors must activate their Archie account in order to access and edit their protocol, update contact information, and submit publication forms. Your Archie account gives you access to your Review Manager (RevMan) file of the protocol template. <u>RevMan</u> is the software used by Cochrane to prepare systematic reviews.

#### **Key Deadlines**

A first draft of a protocol should be submitted to the editorial base <u>three months</u> after title registration; the protocol should be published within <u>six months</u> of title registration.

The completed systematic review should be submitted within <u>18 months</u> and published within <u>two years</u> of the protocol being published.



It may be helpful to complete the Cochrane Online Learning Modules for Authors before undertaking the review process

#### **Protocol Preparation**

- We strongly recommend <u>downloading RevMan</u> and completing the tutorial before you begin work on your protocol.
- You may access your RevMan file via Archie or RevMan; however, all editing is done in RevMan. The process of retrieving, editing, and saving your protocol is explained in the RevMan tutorial.
- To access your protocol:
  - In RevMan, select the option "Check out" from the File menu or "Go to My Reviews" from the Welcome window.
  - In Archie, navigate to the Eyes and Vision Group folder, click on the subfolder "Reviews" and then look for your file in the folder "Registered titles" (first time) or "Protocols".
- Each time you make a change to your RevMan file, you should "check it in" to Archie so that the draft is saved on our central server. This process is explained in the RevMan tutorial.

#### Training and Workshops

Click here to see if a Cochrane Center near you has scheduled a training workshop

### Things to Consider While Drafting Your Protocol

- General background information
  - Description of the condition
  - Description of the intervention
  - How the intervention might work
  - Why is it important to do this review

These items are described in Chapter 4.5 of the <u>Cochrane</u> <u>Handbook</u>. Also feel free to consult our website for additional <u>review author resources</u>.

### Things to Consider While Drafting Your Protocol

- The CEV Trials Search Coordinator will create and run the search strategies for your review. In the section "Search strategy for identification of studies", specify the search terms you believe should be included in the search. The Trials Search Coordinator will develop and insert the search strategy after your protocol is submitted and will run the searches when your protocol has been approved for publication.
- It may be helpful to refer to CEV protocols published in <u>the Cochrane Library</u> to get a feel for what's expected in a Cochrane methods section. Chapter 4.5 of the <u>Cochrane Handbook</u> and the <u>CEV Module</u> are also good references.

#### **Submitting Your Protocol**

- All protocols must be submitted to CEV editors using RevMan.
   When you "check in" your protocol, RevMan will offer the additional option of submitting it for editorial approval.
- Steps in the authoring and editorial processes are tracked using the <u>Workflows</u> system in Archie. The contact author of the protocol will receive a Workflow "ticket" (via email) describing the task needed and the due date to complete the task. When done, the contact author can click the link in the email to mark the task as done.



Authors and editors can view tasks assigned to them by logging into Archie and clicking on the Organizer tab.

### Editorial and Peer Review of the Protocol



All Cochrane protocols undergo a multi-step editorial process

- 1. CEV methodologists and advisors will review your protocol and may respond with initial comments or forward to the contact editor.
- 2. CEV contact editors will review the clinical content of the protocol and either respond with comments or approve for peer review.
- 3. Your protocol will be sent out for external peer review.
- 4. CEV methodologists and advisors will review your revised protocol and may respond with additional comments or send to the Coordinating Editor for approval.
- 5. The CEV Coordinating Editor will review your protocol and may respond with comments or approve the protocol for publication.
- 6. Your protocol will be copy-edited and sent to you for final approval.
- 7. Your approved protocol will be submitted for publication in *the Cochrane Library*

#### **Publication of the Protocol**

- Shortly after your protocol is accepted for publication, the CEV Trials Search Coordinator will run the searches and send you the search results (a list of titles and abstracts) in a text file, a reference management file (e.g., EndNote), or upload the search results to <u>Covidence</u>.
- Your protocol file will be saved in Archie and will be used as the starting point when you begin preparing your review.

#### Systematic Review Preparation

- Two authors independently screen the titles and abstracts from the search results and classify each record as 1) definitely relevant, 2) possibly relevant, or 3) definitely not relevant
- Authors should retrieve and independently review the full-text report of all records designated "definitely relevant" or "possibly relevant" to select a final list of "included studies"
- Remember to document reasons for excluding studies from your review. You will need to enter this information in RevMan's Characteristics of Excluded Studies Table.
- The CEV editorial team can assist with retrieving full text articles if needed
- Consult Chapter 7 of the <u>Cochrane Handbook</u> for guidance

#### Systematic Review Preparation

- Check the bibliographies of included studies, conference proceedings, and the Science Citation Index for other RCTs and CCTs relevant to your review. Document where you found any additional references.
- Prepare forms for data extraction and risk of bias assessments. You also will use this information to complete the Characteristics of Included Studies Table



Click here for sample data extraction and risk of bias forms and links to free web-based data extraction systems such as Covidence and SRDR



### Data Extraction and Risk of Bias Assessments

- At least two authors should independently
  - Assess the risk of bias of the included studies and complete a Risk of Bias
     Table for each study
  - Extract relevant design, conduct, and analysis characteristics and complete a Characteristics of Included Studies Table for each study
  - Extract outcome data (e.g., visual acuity, intraocular pressure)
- Contact the authors of included studies for missing information
- Resolve disagreements by consensus or with a third party
- Enter above data into corresponding tables in RevMan
- Consult Chapters 7 and 8 of the <u>Cochrane Handbook</u> for additional guidance

#### Data Analysis

- Select the appropriate measure of effect for each outcome (e.g., dichotomous, continuous)
- Test for heterogeneity
- Perform subgroup analyses if appropriate
- Test for publication bias
- Conduct sensitivity analyses
- Consult Chapters 9 and 10 of the <u>Cochrane Handbook</u> for additional guidance

### Things to Consider While Drafting Your Systematic Review

- Confirm that the review methods are consistent with the published protocol. Discuss deviations from the protocol with your co-authors and the CEV editorial team before submitting the review for publication.
- Confirm that all required sections of the review are complete:
  - Main text: Remember to update verbs from future to past tense where appropriate (e.g., change protocol text "We will search MEDLINE" to "We searched MEDLINE")
  - References: Included studies, excluded studies, studies awaiting assessment, other references
  - Tables and figures: Including data tables, risk of bias tables, characteristics of included and excluded studies tables

#### Submitting Your Systematic Review

- Before you submit your review, you will need to check that
  your review meets the methodological and reporting
  standards of Cochrane reviews. Checklists for the
  Methodological Expectations of Cochrane Intervention
  Reviews (MECIR) are available <a href="here">here</a>. Please note that there are
  separate checklists for the conduct of reviews, reporting of
  reviews, and the writing of the Plain Language Summary.
- As with protocols, full reviews must be submitted to CEV editors using RevMan. When you "check in" your review, RevMan will offer the additional option of submitting it for editorial approval.

### Editorial and Peer Review of the Systematic Review

The editorial review process for full reviews is similar to the editorial review process for protocols.

#### Additionally,

- All reviews will undergo a <u>pre-publication screening</u> following guidance from the Cochrane Editorial Unit to ensure the quality of the review.
- The literature searches may need to be updated prior to publication if the searches are out of date.

## Publication of the Systematic Review Congratulations!

You have completed a Cochrane Review

Your review will be submitted for publication in the Cochrane Library



#### Updating the Review

- Once your review is published you will receive a free subscription to the Cochrane Library
- Your review will be indexed on MEDLINE
- You also may choose to submit your review to another peer reviewed journal. Please consult Chapter 2 of the Cochrane Handbook for guidance on co-publication
- You will need to update your review based on post-publication comments or as new data become available
- The CEV editorial team will send you updated search results every year for your consideration
- You should plan on updating your review every two years