A Day With the Cochrane
Information Retrieval Methods Group
(IRMG)

Cochrane Handbook Chapter 4: *Searching for and selecting studies*

An introduction, overview of what's new
and how it ties in with Cochrane Review conduct standards (MECIR)

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Presentation overview

Overview of today's presentations

Overview of the Cochrane Handbook Chapter 4: *Searching for and selecting studies* and What's 'new' in Chapter 4 (or considerably updated / expanded)

Mandatory standards for Cochrane Reviews - searching for studies (Methodological Expectations of Cochrane Intervention Reviews - MECIR)

Cochrane Interactive Learning modules

IRMG

Questions / comments / discussion

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Overview of today's presentations

Presentation 1: Cochrane Handbook Chapter 4: Searching for and selecting studies – introduction, overview of what's new and how it now ties in with Cochrane Review conduct standards (MECIR)	**Presentation 2:** Cochrane Handbook Chapter 4: Searching for and selecting studies – guidance on selecting studies	**Presentation 3:** Cochrane Handbook Chapter 21: Qualitative evidence – guidance on searching for qualitative evidence	**Presentation 4:** Cochrane Handbook Chapter 19: Adverse effects – guidance on searching for adverse effects
Carol Lefebvre IRMG Lead Convenor and lead author of the Searching for and selecting studies chapter of the Cochrane Handbook	**Julie Glanville** IRMG Co-convenor and co-author of the Searching for and selecting studies chapter of the Cochrane Handbook	**Andrew Booth** IRMG member and co-author of the Qualitative evidence chapter of the Cochrane Handbook	**Su Golder** IRMG member and co-author of the Adverse effects chapter of the Cochrane Handbook

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The Cochrane Handbook

- Overview of the Cochrane Handbook Chapter 4: *Searching for and selecting studies*

Fully revised and re-published 1 Oct 2019 (hardback book and free online version)
(with some revisions in Sept 2020 (but not to the searching chapter)

Focus on Handbook guidance being evidence-based

Cochrane MECIR standards fully incorporated into the text (see next slides)

Chapter 4 – Searching for and Selecting Studies
– principles of searching/selecting studies for systematic reviews
– sources including databases, trials registers etc.
– search hints and tips
– RCT filters for MEDLINE, Embase and CINAHL Plus
– how to select studies from those identified

Useful when undertaking systematic reviews and other evidence syntheses
- essential when undertaking Cochrane Reviews!

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The Cochrane Handbook

- Cochrane Handbook Chapter 4: *Searching for and selecting studies*

Published in 3 parts:

The 'Main text' (online and printed version)

A Technical Supplement (online only)

Appendix of Resources (online only)

All online versions are freely available to all

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The Cochrane Handbook

Chapter 4: Searching for and selecting studies

Carol Lefebvre, Julie Glanville, Simon Briscoe, Anne Littlewood, Chris Marshall, Maria-Inti Metzendorf, Anna Noel-Storr, Tamara Rader, Farhad Shokraneh, James Thomas, L. Susan Wieland; on behalf of the Cochrane Information Retrieval Methods Group

Key Points:

- Review authors should work closely, from the start of the protocol, with an experienced medical/healthcare librarian or information specialist.
- Studies (not reports of studies) are included in Cochrane Reviews but identifying reports of studies is currently the most convenient approach to identifying the majority of studies and obtaining information about them and their results.
- The Cochrane Central Register of Controlled Trials (CENTRAL) and MEDLINE, together with Embase (if access to Embase is available to the review team) should be searched for all Cochrane Reviews.
- Additionally, for all Cochrane Reviews, the Specialized Register of the relevant Cochrane Review Groups should be searched, either internally within the Review Group or via CENTRAL.
- Trials registers should be searched for all Cochrane Reviews and other sources such as regulatory agencies and clinical study reports (CSRs) are an increasingly important source of information for study results.
- Searches should aim for high sensitivity, which may result in relatively low precision.
- Search strategies should avoid using too many *different* search concepts but a wide variety of search terms should be combined with OR within *each* included concept.
- Both free-text and subject headings (e.g. Medical Subject Headings (MeSH) and Emtree) should be used.
- Published, highly sensitive, validated search strategies (filters) to identify randomized trials should be considered, such as the Cochrane Highly Sensitive Search Strategies for identifying randomized trials in MEDLINE (but do not apply these randomized trial or human filters in CENTRAL).

Cite this chapter as: Lefebvre C, Glanville J, Briscoe S, Littlewood A, Marshall C, Metzendorf M-I, Noel-Storr A, Rader T, Shokraneh F, Thomas J, Wieland LS. Chapter 4: Searching for and selecting studies. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). *Cochrane Handbook for Systematic Reviews of Interventions* version 6.1 (updated September 2020). Cochrane, 2020. Available from www.training.cochrane.org/handbook.

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The Cochrane Handbook

- Cochrane Handbook Chapter 4: *Searching for and selecting studies*
      - Main Text

What's 'new' (or considerably updated / expanded)

4.4.8 Peer review of search strategies

4.4.10 Timing of searches

4.4.11 When to stop searching

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The Cochrane Handbook

- Cochrane Handbook Chapter 4: *Searching for and selecting studies*
      - Technical Supplement

1 Sources to search
1.1 Bibliographic databases other than CENTRAL, MEDLINE and Embase
1.1.1 The Cochrane Register of Studies
1.1.2 National and regional databases
1.1.3 Subject-specific databases
1.1.4 Citation indexes
1.1.5 Dissertations and theses databases
1.1.6 Grey literature databases
1.2 Ongoing studies and unpublished data sources: further considerations
1.2.1 Trials registers and trials results registers
1.2.2 Regulatory agency sources and clinical study reports
1.3 Journals and other non-bibliographic database sources
1.3.1 Handsearching
1.3.2 Full text journals available electronically
1.3.3 Conference abstracts and proceedings
1.3.4 Other reviews, guidelines and reference lists as sources of studies
1.3.5 General web searching (including search engines / Google Scholar etc)
1.4 Summary points

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The Cochrane Handbook

- Cochrane Handbook Chapter 4: *Searching for and selecting studies*
    - *Technical Supplement*

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    - *Technical Supplement*

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The Cochrane Handbook

- Cochrane Handbook Chapter 4: *Searching for and selecting studies*
    - *Technical Supplement*

4 Managing references
4.1 Reference Management software
4.2 Which fields to download
4.3 De-duplicating references
4.4 Summary points

5 Supplement information

6 Acknowledgements

7 References

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The Cochrane Handbook

Additional specific searching content available in other Chapters e.g.:

Presentation 3: Cochrane Handbook Chapter 21: Qualitative evidence – guidance on searching for qualitative evidence	Presentation 4: Cochrane Handbook Chapter 19: Adverse effects – guidance on searching for adverse effects
Andrew Booth IRMG member and co-author of the Qualitative evidence chapter of the Cochrane Handbook	**Su Golder** IRMG member and co-author of the Adverse effects chapter of the Cochrane Handbook

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How to cite the <mark>Searching for and selecting studies chapter</mark>:

Lefebvre C, Glanville J, Briscoe S, Littlewood A, Marshall C, Metzendorf M-I, Noel-Storr A, Rader T, Shokraneh F, Thomas J, Wieland LS. **Chapter 4: Searching for and selecting studies**. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). *Cochrane Handbook for Systematic Reviews of Interventions* version 6.1 (updated Sept 2020). Cochrane, 2020. Available from https://training.cochrane.org/handbook

https://training.cochrane.org/handbook/current/chapter-04

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How to cite the **Searching for and selecting studies chapter** <mark>Technical Supplement</mark>:

Lefebvre C, Glanville J, Briscoe S, Littlewood A, Marshall C, Metzendorf M-I, Noel-Storr A, Rader T, Shokraneh F, Thomas J, Wieland LS. <mark>Technical Supplement to Chapter 4</mark>: Searching for and selecting studies. In: Higgins JPT, Thomas J, Chandler J, Cumpston MS, Li T, Page MJ, Welch VA (eds). Cochrane Handbook for Systematic Reviews of Interventions Version 6.1. Cochrane, 2020. Available from: www.training.cochrane.org/handbook

https://training.cochrane.org/handbook/version-6/chapter-4-tech-suppl

Technical Supplement and <mark>Appendix of Resources</mark>
https://training.cochrane.org/handbook/supplementary-materials

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Mandatory standards for Cochrane Reviews - searching for studies

Improving quality in Cochrane Reviews (MECIR)

- – Methodological Expectations in Cochrane Intervention Reviews
- – Expectations / standards / recommendations
- – Mandatory / highly desirable / good practice

- – **Conduct of new reviews - published 2011 - updated 2020**
- – Reporting of new reviews - published 2012 - updated 2016
- – Reporting of protocols of new reviews - published 2016
- – Updating of reviews - published 2016
- – Latest version always the online version - March 2020

https://methods.cochrane.org/methodological-expectations-cochrane-intervention-reviews

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Mandatory standards for Cochrane Reviews - searching for studies

Searching key databases C24

Search the **Cochrane Review Group's Specialized Register** (internally, e.g. via the Cochrane Register of Studies, or externally via CENTRAL). Ensure that **CENTRAL, MEDLINE** (e.g. via PubMed) and **Embase**, if it is available to either the CRG or the review author, have been searched (either for the review or for the Review Group's Specialized Register).

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Mandatory standards for Cochrane Reviews
- searching for studies

Searching for different types of evidence C26

If the review has specific eligibility criteria around study design to address **adverse effects**, **economic issues** or **qualitative research** questions, undertake searches to address them.

Searching trials registers C27

Search trials registers and repositories of results, where relevant to the topic through **ClinicalTrials.gov**, the WHO International Clinical Trials Registry Platform **(ICTRP)** portal and other sources as appropriate.

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Mandatory standards for Cochrane Reviews
- searching for studies

Searching reference lists C30

Check **reference lists in included studies** and **any relevant systematic reviews** identified.

Structuring search strategies for bibliographic databases C32

Inform the structure of search strategies in bibliographic databases around the main concepts of the review, **using appropriate elements from PICO** and study design. In structuring the search, **maximize sensitivity** whilst striving for reasonable precision. Ensure correct use of the AND and OR operators.

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Mandatory standards for Cochrane Reviews
- searching for studies

Developing search strategies for bibliographic databases C33

Identify appropriate **controlled vocabulary** (e.g. MeSH, Emtree, including 'exploded' terms) **and free-text terms** (considering, for example, spelling variants, synonyms, acronyms, truncation and proximity operators).

Restricting database searches C35

Justify the use of any **restrictions** in the search strategy on **publication date** or **publication format**.

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Mandatory standards for Cochrane Reviews
- searching for studies

Documenting the search process C36

Document the search process in enough detail to ensure that it can be reported correctly in the review.
(Note: 'reporting standards' separate from 'conduct standards')

Rerunning searches C37

Rerun or update searches for all relevant databases **within 12 months** before publication of the review or review update, and screen the results for potentially eligible studies.
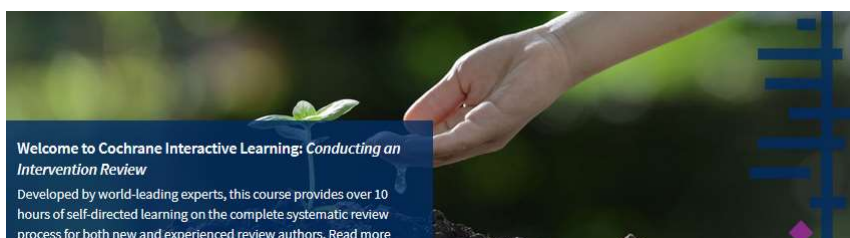
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Mandatory standards for Cochrane Reviews - searching for studies

Examining errata C48

Examine any relevant retraction statements and errata for information.

(Upgraded Jan 2018 from 'Highly Desirable' to 'Mandatory')

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Cochrane Interactive Learning

11 modules:

1) Introduction to conducting systematic reviews
2) Writing the review protocol
3) Searching for studies
4) Selecting studies and collecting data
5) Introduction to study quality and risk of bias
6) Analysing the data
7) Interpreting the findings
8) Reporting the review
9) Introduction to health economics
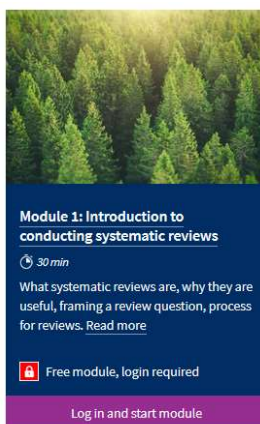10) Network Meta Analysis
11) Health equity in systematic reviews - NEW

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Cochrane Interactive Learning

Module 1 - free

Module 1: Introduction to conducting systematic reviews

30 min

What systematic reviews are, why they are useful, framing a review question, process for reviews. Read more

🔒 Free module, login required

Log in and start module

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Cochrane Interactive Learning

Module 3 - free until 5 Nov 2020

Module 3: Searching for studies

🕐 60 min

Why systematic and rigorous searches are important, planning and designing search strategies, sources of studies, managing and reporting the process. Read more

🔒 Restricted

Log in to access

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The Cochrane Information Retrieval Methods Group

https://methods.cochrane.org/irmg/

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Questions / comments / discussion

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