

Template text for search methods: New reviews

This document draws together best practice examples from the Cochrane Information Specialist community in relation to writing the search methods in a Cochrane review. We have checked these examples against the MECIR reporting standards for reviews, and against the latest version of the Style Manual. The Copy-edit Support Team have checked and approved the text.

Abstract, Search methods

MECIR R6 - Include date of last search, indicate databases and sources searched (Mandatory)

Example from the MECIR reporting standards:

We searched CENTRAL, MEDLINE, Embase, [x] other databases and [x] trials registers to [month year], together with reference checking, citation searching and contact with study authors to identify additional studies.

OR

We used the standard search strategy of Cochrane [group] to search CENTRAL, MEDLINE and [other databases] to [month year]. We also searched clinical trials databases, conference proceedings, and the reference lists of retrieved articles for reports of randomized controlled trials and quasi-randomized trials.

OR

We searched the following databases up to [month year]: the Cochrane [group] Specialised Register, CENTRAL, MEDLINE and [other databases]. We also searched [x] trials registers, and checked the reference lists of included studies for further references to relevant randomised controlled trials (RCTs). We handsearched [conference details].

We undertook a separate search for adverse effects of interventions for [topic] in [database/s] in [month year].

OR

The [group] Information Specialist searched the [group] Trials Register; CENTRAL [OR the Cochrane Register of Studies Online (CRSO)], PubMed [OR Ovid MEDLINE]; and [other databases]; [trials registers] and additional sources for published and unpublished trials. The date of the search was [month year].

Search methods for identification of studies

MECIR R34 Search sources. List all sources searched (Mandatory)

MECIR R35 Latest searches. Provide the dates of the last search and issue/version number for each database where relevant (Mandatory)

MECIR R38 Search strategies for bibliographic databases (Mandatory)

Electronic searches

The [group] Information Specialist conducted systematic searches in the following databases for randomised controlled trials and controlled clinical trials without language, publication year or

publication status restrictions:

- the [group] Trials Register (searched [day month year]);
- the Cochrane Central Register of Controlled Trials (CENTRAL; [year, issue]) in the Cochrane Library [OR via the Cochrane Register of Studies Online (CRSO) OR via the Cochrane Register of Studies (CRS-Web)]; (searched [day month year]);
- PubMed (1946 to [day month year]) [OR Ovid MEDLINE (In-Process & Other Non-Indexed Citations) and PubMed (as a top up to searches in Ovid MEDLINE) (searched [day month year])]; and
- [other databases] (searched [day month year]).

The Information Specialist modelled subject strategies for databases on the search strategy designed for [core database]. Where appropriate, they were combined with subject strategy adaptations of the highly sensitive search strategy designed by the Cochrane Collaboration for identifying randomised controlled trials and controlled clinical trials (as described in the *Cochrane Handbook for Systematic Reviews of Interventions* Chapter 6, Lefebvre 2011). Search strategies for major databases are provided in Appendix 1.

OR

We used the criteria and standard methods of Cochrane and the Cochrane [group] (see the Cochrane [group] search strategy for Specialized Register). We conducted a comprehensive search including: the Cochrane Central Register of Controlled Trials (CENTRAL; [year, issue]) in the Cochrane Library; and MEDLINE via PubMed to [day month year]; using the following search terms: [enter here], plus database-specific limiters for RCTs (see Appendix 1 for the full search strategies for each database). We did not apply language restrictions.

We searched clinical trials registries for ongoing or recently completed trials.

OR

We aimed to identify all relevant RCTs regardless of language or publication status (published, unpublished, in press, or in progress).

We searched the following databases up to [day month year]:

- the Cochrane [group] Specialised Register using the search strategy in Appendix 1;
- the Cochrane Central Register of Controlled Trials (CENTRAL; [year, issue]), in the Cochrane Library using the strategy in Appendix 2;
- MEDLINE via Ovid (from 1946) using the strategy in Appendix 3; and
- [other databases].

We searched the following trials registries on [day month year]:

- the ISRCTN registry (www.isrctn.com);
- ClinicalTrials.gov (clinicaltrials.gov); and
- [other registries].

OR

We searched the [group] Specialised Register up to [day month year] through contact with the Information Specialist using search terms relevant to this review. The Cochrane [group] Specialised Register contains studies identified from several sources:

1. monthly searches of the Cochrane Central Register of Controlled Trials (CENTRAL);
2. weekly searches of MEDLINE Ovid SP;
3. hand searches of [topic]-related journals and the proceedings of major conferences;
4. searches of the current year of Embase Ovid SP;
5. weekly current awareness alerts for selected journals; and
6. searches of the World Health Organization (WHO) International Clinical Trials Registry Platform (ICTRP) and ClinicalTrials.gov.

Studies contained in the Specialised Register are identified through search strategies for CENTRAL, MEDLINE, and Embase based on the scope of Cochrane [group]. Details of these strategies, as well as a list of handsearched journals, conference proceedings and current awareness alerts, are available on the [group] website [hyperlink].

See Appendix 1 for search terms used in strategies for this review.

If the final update searches are not being incorporated

For the search methods in the abstract:

We updated this search in [month year], but these results have not yet been incorporated in the review.

For the full search methods:

This review fully incorporates the results of searches conducted up to [month year]. A further [x] reports of trials were identified by a search update conducted in [month year]. Those results have been added to 'Studies awaiting classification' and will be incorporated into the review at the next update.

N.B. When update searches are not being incorporated, the most prominent date shown must be for the search results that were incorporated.

Searching other resources

MECIR R37 searches for different types of evidence e.g. adverse effects (Mandatory)

MECIR R39 Search strategies for other sources (Highly desirable)

Adverse effects

We did not perform a separate search for adverse effects of interventions used for the treatment of [topic]. We considered adverse effects described in included studies only.

OR

We searched [database/s] for adverse effects using the [group's] standard search strategy for adverse effects and [topic/disease] terms.

Searching within other reviews

The Information Specialist searched [database/s] to retrieve existing systematic reviews relevant to this systematic review, so that we could scan their reference lists for additional trials.

Searching reference lists

We searched the reference lists of papers reporting studies selected for inclusion in this review in order to identify additional relevant trials.

OR

We checked the bibliographies of included studies and relevant reviews for further references to relevant trials.

Searching by contacting individuals or organisations

Where necessary, we contacted authors of key papers and abstracts to request further information about their trials.

OR

We sought information about unpublished or incomplete trials via correspondence with investigators or organisations, or both, known to be involved in previous relevant studies.

Conference proceedings

We searched for conference abstracts from [conference name/s]. Our searches were carried out in [database name/s] for the period [month year to month year].

OR

We handsearched abstracts from the [conference title] between [year] and [year] for relevant trials.

Results of the search

The searches of the [x] databases (see Electronic searches) retrieved [x] records. Our searches of other resources [insert sources e.g. hand searches] identified [x] additional studies that appeared to meet the inclusion criteria. Our searches of the trials registers identified [x] further studies. Our screening of the reference lists of the included publications did/did not reveal [x] additional RCTs. We therefore had a total of [x] records.

Once duplicates had been removed, we had a total of [x] records. We excluded [x] records based on titles and abstracts. We obtained the full text of the remaining [x] records. We excluded [x] studies (see Characteristics of excluded studies). We added [x] records to Characteristics of studies awaiting classification. We identified [x] ongoing studies.

We included [x] studies reported in [x] references. For a further description of our screening process, see the study flow diagram (Figure 1).

Discussion

MECIR R100 Limitations (Mandatory)

Potential biases in the review process

We attempted to conduct a comprehensive search for studies, but the fact that [x] studies are awaiting classification and have not yet been incorporated may be a source of potential bias.

Authors' conclusions

MECIR R101 Conclusions: implications for practice (Mandatory)

Authors conclusions: Implication for practice

There are [x] studies that we have identified as potentially relevant but have yet to classify; these may alter the conclusions of the review once assessed (see Studies awaiting classification).

Template text for search methods: Updates of reviews

The text above for new reviews will still be relevant, but the following is specific to updated reviews.

Abstract, Search methods

We updated our searches of the following databases to [month year]: the Cochrane [group] Specialised Register, CENTRAL, MEDLINE and [other databases]. We also searched [x] trials registers, and checked the reference lists of included studies for further references to relevant randomised controlled trials (RCTs). We handsearched [conference details].

Search methods for identification of studies

There are at least four possibilities for providing information about search methods in an updated review:

1. An *integrated* approach is to describe all searches together, which may be most feasible if the original search was repeated in exactly the same form.
2. An *incremental* approach is to add information at each update to describe explicitly which searches were done for the update, retaining all information about previous searches.
3. A *replacement* approach is to describe only the searches done for the update, using the previous review as one source of studies.
4. A *hybrid* approach is to describe only the searches done for the update in the main text, using Appendices to provide information about previous searches.

One example of text for the *replacement* approach is given below:

For this update, we revised all our search strategies in line with current Cochrane [group] practices. We searched the following databases up to [day month year]:

- the Cochrane [group] Specialised Register using the search strategy in Appendix 1;
- the Cochrane Central Register of Controlled Trials (CENTRAL) [year, issue], in the Cochrane Library using the strategy in Appendix 2;
- MEDLINE via Ovid (from 1946) using the strategy in Appendix 3; and
- [other databases].

Details of the previous search strategies are available in [previous review's first author name and year].

Documenting differences from original searches in an updated review:

You could record any differences in your search strategies for an update either in the search methods, or in the section on 'Differences between protocol and review'. Examples of things you might say include (delete as appropriate):

We changed the databases that we planned to search in the protocol because of: lack of access to some of the databases we originally planned to search, OR due to changes to standard search routines at the Cochrane [group], OR because no unique relevant records were identified in the original/previous search, OR because the database is no longer being updated, etc.

OR

We updated our search terms by adding new drug/intervention names, OR relevant new database indexing terms, OR by removing unhelpful search terms that identified many irrelevant studies in the original search, etc.

Results of the search

As shown in Figure 1, our update searches identified [x] records. We screened out [x] references based on titles and abstracts. We examined the remaining [x] records in full text, and excluded [x] (see Characteristics of excluded studies). We included [x] new studies, along with [x] studies from the previous review, which brought the total number of included studies to [x] (see Characteristics of included studies).

OR

We updated the search to [month year]. We screened [x] records from the following databases: Cochrane [Group] Specialised Register [x], CENTRAL [x], MEDLINE [x], Embase [x], and Trials Registries [x]. We identified [x] potentially eligible studies from other sources, OR we did not identify any potentially eligible studies from other sources.

After screening the update results we included [x] studies (see Characteristics of included studies), and excluded [x] studies (see Characteristics of excluded studies). We identified [x] ongoing studies.

We combined these studies with those previously identified for this review, and for this update we have included a total of [x] trials ([x] new), and excluded a total of [x] studies ([x] new); we found [x] ongoing trials, and [x] studies awaiting classification. Figure 1 shows a flow diagram summarising the study selection process.

Study flow diagrams in review updates

There are two broad options for providing information about how studies were identified for an updated version of a review:

1. The results of previous searches can be retained in the review and supplemented with information about studies identified in the update.
2. Alternatively, only information about searches in the current update can be presented, with the previous version of the review serving as one particular source of studies.

For detailed guidance on creating an adapted PRISMA flow diagram for review updates, see <http://www.ncbi.nlm.nih.gov/pubmed/24886533>.