Cochrane

MECIR

Toby Lasserson
April 2016

Trusted evidence.
Informed decisions.
Better health.

Session overview

MECIR: brief history

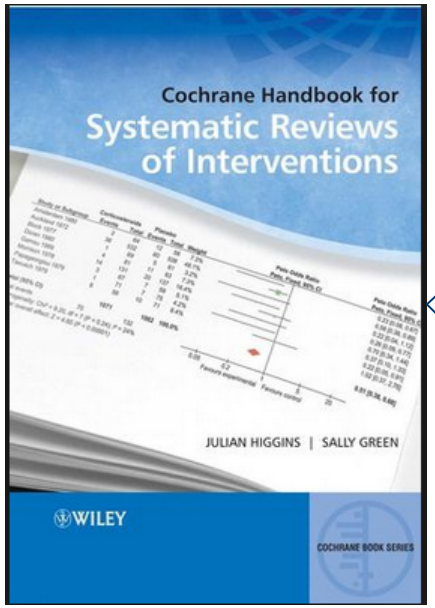
CEU review screening & use of MECIR

MECIR 2.0

Cochrane

MECIR standards

Developed from existing Handbook guidance



Chapter 6: Searching for studies

Authors: Carol Lefebvre, Eric Manheimer and Julie Glanville on behalf of the Cochrane Information Retrieval Methods Group.

Key points

- Review authors should work closely from the start with the Trials Search Co-ordinator (TSC) of their Cochrane Review Group (CRG).
- 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.
- Trials registers and trials results registers are an increasingly important source of information.
- The Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE and EMBASE (if access is available to either the review author or TSC) should be searched for all Cochrane reviews, either directly or via the CRG's Specialized Register.
- Searches should seek high sensitivity, which may result in relatively low precision.
- Too many *different* search concepts should be avoided, but a wide variety of search terms should be combined with OR within *each* concept.
- Both free-text and subject headings should be used (for example Medical Subject Headings (MeSH) and EMTREE).
- Existing highly sensitive search strategies (filters) to identify randomized trials should be used, such as the newly revised Cochrane Highly Sensitive Search Strategies for identifying randomized trials in MEDLINE (but do not apply these filters in CENTRAL).

	Searching for studies				
C24	Mandatory	Searching key databases	Search the Cochrane Review Group's Specialized Register (internally, e.g. via the Cochrane Register of Studies, or externally via CENTRAL). Ensure that CENTRAL and MEDLINE (e.g. via PubMed) have been searched (either for the review or for the Review Group's Specialized Register).	Searches for studies should be as extensive as possible in order to reduce the risk of publication bias and to identify as much relevant evidence as possible. The minimum databases to be covered are the Cochrane Review Group's Specialized Register (if it exists and was designed to support reviews in this way), CENTRAL, MEDLINE, and Embase (if available to the CRG or the review author). Expertise may be required to avoid unnecessary duplication of effort. Some, but not all, reports of eligible studies from MEDLINE, Embase and the Cochrane Review Groups' Specialized Registers are already included in CENTRAL. Supplementary searches should be performed as described in sections 6.3.2 and 6.3.3 of the *Cochrane Handbook*.	6.2.1.1 6.3.3
C25	Highly desirable	Searching specialist bibliographic databases	Search appropriate national, regional and subject specific bibliographic databases.	Searches for studies should be as extensive as possible in order to reduce the risk of publication bias and to identify as much relevant evidence as possible. Databases relevant to the review topic should be covered (e.g CINAHL for nursing-related topics, PsychINFO for psychological interventions), and regional databases (e.g. LILACS) should be considered.	6.2.1.4 6.2.1.5 6.4.1
C26	Mandatory	Searching for different types of evidence	*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.	Sometimes different searches will be conducted for different types of evidence, such as for non-randomized studies for addressing adverse effects, or for economic evaluation studies.	13.3 14.5 15.3 20.3.2.1
C27	Mandatory	Searching trials registers	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.	Searches for studies should be as extensive as possible in order to reduce the risk of publication bias and to identify as much relevant evidence as possible. Although ClinicalTrials.gov is included as one of the registers within the WHO ICTRP portal, it is recommended that both ClinicalTrials.gov and the ICTRP portal are searched separately due to additional features in ClinicalTrials.gov.	6.2.3.1 6.2.3.2 6.2.3.3

	Search methods for identification of studies			
R34	Mandatory	Search sources	List all sources searched, including: databases, trials registers, web sites and grey literature. Database names should include platform/provider name and dates of coverage; web sites should include full name and URL. State whether reference lists were searched and whether individuals or organizations were contacted.	*MECIR conduct standard 36* (Document the search process in enough detail to ensure that it can be reported correctly in the review.) *Also MECIR conduct standards 24 – 31.* [PRISMA item 7]
R35	Mandatory	Latest searches	Provide the date of the last search and the issue / version number (where relevant) for each database whose results were evaluated and incorporated into the reviewIf a search was re-run prior to publication, the results of which were not incorporated, explain how the results were dealt with and provide the date.	The review should provide the search date from which studies have been retrieved and assessed for inclusion. This is the date up to which the conclusions of the review are valid. It should reflect the date of the most recent set of searches from which all records have been screened for relevance and any studies meeting the eligibility criteria have been fully incorporated into the review (studies may be awaiting classification if, for example, the review authors are awaiting translation or clarification from authors or sponsors). Since the review is likely to have drawn on searches conducted across multiple databases, it is possible that searches were performed on more than one date. The earliest date of the most recent set of searches should be provided in the review text and as the hard-coded date of the last search. The remaining dates for other databases should be reported in an appendix.

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MECIR standards

Developed from existing Handbook guidance

Extensive consultation process

Methodological Expectations of Cochrane Intervention Reviews (MECIR)

Development of methodological standards for the conduct of intervention reviews

Annex 2: Feedback and response to consultation

7 October 2011

Item number	Status	Item description	Expectation (now Standard)	...conditional on...	Rationale	Agree?	Disagree?	Change status to...? [or omit?]	Change status to...? [or omit?] MG	Comments	Response	New Item number
101	Mandatory	Pre-defining objectives	Define in advance the objectives of the review, including participants, interventions, comparators and outcomes.		Objectives give the review focus and must be clear before appropriate eligibility criteria can be developed.	CRG: 31 C: 7 F: 4 M: 6	CRG: 0 C: 0 F: 0 M: 0	CRG29: omit		CRG29: obvious CRG25: Query whether the outcomes must be listed in the Objectives CRG21: Surely this is built into the protocol/review format, and happens already? If not, it shouldn't be a Cochrane product CRG16: May need some flexibility in exact wording. CRG34: It should be simply stated under Expectation "Define in advance the primary objective(s) of the review", because the intention here is to highlight the need of pre-defining the objective(s), not what the objectives should include. The second bit of the sentence ("including participants, interventions, comparators and outcomes") would not only go beyond this proposed standard, but could also cause confusion, since It is handbook advice that a primary/main objective IS defined (including in its format: intervention or comparison, health problem, participants type, and setting if appropriate), and that the main objective "MIGHT be followed by a series of specific objectives relating to different participant groups, different comparisons of interventions OR different outcome measures." Thus, it looks like that a primary objective should be mandatory, but specific ones, which may vary according to participants, interventions, comparisons OR (rather than AND) outcomes, should not, and the Expectation statement is not really reflecting his at present. MG8: Either this item or item 112 should ask reviewers to clarify whether the aim of the IR is to compare two or more interventions.	Status and standard unchanged. Details of the review question, and where they are stated, is a reporting issue. Rationale extended to comment on comparisons of multiple interventions.	2
102	Highly desirable	Formulating review questions	Ensure that the review question, and particularly the outcomes of interest, address issues that are important to stakeholders such as consumers		Cochrane reviews are intended to support clinical practice and policy, not just scientific curiosity. Qualitative research, i.e. studies that explore the experience of those involved in providing and	CRG: 20 C: 7 F: 4 M: 5	CRG: 5 C: 0 F: 0 M: 0	CRG35: Mandatory CRG32: mandatory CRG31: Mandatory CRG29: omit CRG5: Omit, stick to health science CRG34:		CRG35: It is essential that our reviews are addressing issues that are relevant to stakeholders and end-users. CRG32: :The big efforts to produce a high-quality Cochrane review should primarily focus on patient-relevant outcomes (additional outcomes might be reported). No Cochrane review should be published investigating surrogate outcomes only. CRG30: Should there be a separate section to acknowledge consumer or stakeholder comments to the review question? CRG29: can not be checked or implemented	Status changed to *Mandatory*. Standard modified to expand on types of stakeholders. Rationale extended to incorporate extended to mention the interests of consumers.	1

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MECIR standards

Developed from existing Handbook guidance

Extensive consultation process

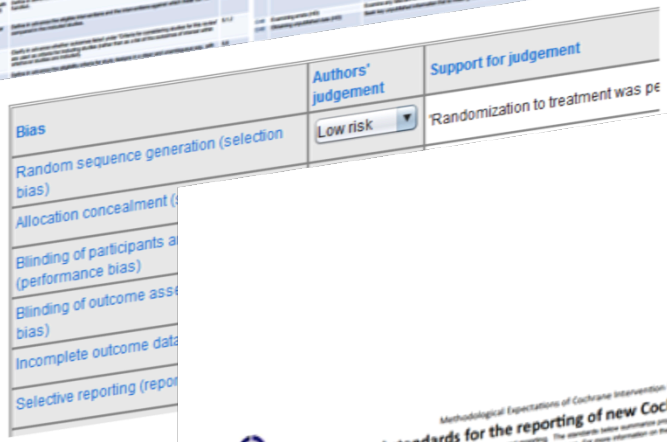
Never apply all at once


Methodological Expectations of Cochrane Intervention Reviews (MECIR)

Methodological standards for the conduct of new Cochrane Intervention Reviews (2.3)

Cochrane Reviews are seen as exemplifying best practice in the quality of both their conduct and reporting. The standards below summarize proposed attributes of the conduct of reviews of interventions described in the Cochrane Handbook that have been established as either mandatory (M) or highly desirable (HD) for new Cochrane Reviews. For more information on the MECIR project: www.editorial-unit.cochrane.org/mecir

Julian Higgins, Rachel Churchill, Toby Lasserson, Jackie Chandler and David Tovey



Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	'Randomization to treatment was pe
Allocation concealment (s		
Blinding of participants a (performance bias)		
Blinding of outcome asse bias)		
Incomplete outcome data		
Selective reporting (repor		


Methodological Expectations of Cochrane Intervention Reviews (MECIR)

Methodological standards for the reporting of new Cochrane Intervention Reviews (1.1)

Cochrane Reviews are seen as exemplifying best practice in the quality of both their conduct and reporting. The standards below summarize proposed attributes of the reporting of reviews of interventions described in the Cochrane Handbook that have been established as either mandatory (M) or highly desirable (HD) for new Cochrane Reviews. For more information on the MECIR project: www.editorial-unit.cochrane.org/mecir

Jackie Chandler, Rachel Churchill, Julian Higgins, Toby Lasserson and David Tovey


- Intervention review
  - Title
  - Protocol information
  - Main text
    - Abstract
    - Plain language summary
    - Background

- Intervention review
  - Title
  - Review information
  - Main text
    - Abstract
      - Background
      - Objectives
      - Search methods
      - Selection criteria
      - Data collection and analysis
      - Main results
      - Authors' conclusions
    - Plain language summary
    - Background
      - Objectives
    - Methods
    - Results
    - Discussion
    - Authors' conclusions
      - Acknowledgements
      - Contributions of authors
      - Declarations of interest
      - Differences between protocol and review
      - Published notes
  - Tables
    - Characteristics of studies
    - Summary of findings tables

Cochrane

MECIR standards

Developed from existing Handbook guidance

Extensive consultation process

Never apply all at once

Supported: Software prompts for users

Text of Review | 1.2 Machine usage -...

04 September 2008	Updated	Literature search re-run.

Add Event

History

Abstract

Background

Continuous Positive Airways Pressure (CPAP) is considered to be the cornerstone of therapy for obstructive sleep apnoea (OSA). However, compliance with this treatment is frequently poor, which may lead to ongoing symptoms of sleep disruption, daytime sleepiness and poor waking cognitive function. Mechanical interventions which involve changing the way that positive pressure is delivered, and the addition of humidification, might improve compliance.

Objectives

To determine the efficacy of pressure level modifications and additional humidification in increasing CPAP machine usage.

Search methods

We searched the Cochrane Airways Group Specialised Register (September 2008).

Selection criteria

Randomised controlled trials (RCTs) assessing interventions to improve compliance with CPAP usage. Control groups received fixed pressure CPAP.

Data collection and analysis

Two authors assessed articles for inclusion in the review and extracted data. We made attempts to obtain additional unpublished data from the trialists.

Main results

Forty-five studies met the inclusion criteria (1874 participants). **Auto-CPAP (30 studies, 1136 participants):** a statistically significant difference in machine usage of 0.21 hours/night (0.08 to 0.35) was observed in favour of auto-CPAP from cross-over studies. This difference is of questionable clinical significance. Pooled effect estimates from parallel group trials detected a similar sized difference for average nightly machine usage, but this was not statistically significant. Evidence from parallel group studies did not identify a statistically significant difference between pressure modes in Epworth Sleepiness Scores, but there was an overall reduction of 0.64 units with cross-over studies (-0.12 to -1.16) in favour of auto-CPAP. Parallel group studies did not identify a significant difference. More participants preferred auto-CPAP to fixed CPAP where this was measured. **Bi-level PAP (six studies, 285 participants):** no significant differences were observed in machine usage. One small study found no difference in preference. **C-Flex (six studies, 318 participants):** no significant difference was observed in machine usage. **Humidification (three studies, 135 participants):** there were conflicting findings between the studies. Two parallel group trials found no significant difference in machine usage, whereas a cross-over study found a significant difference.

Authors' conclusions

Improvement in average machine use of auto-CPAP was superior in studies with a cross-over design; the point estimate in parallel group trials was similar, but did not reach statistical significance. It is uncertain how use of machines in study settings relates to 'real world' use. Where

Guidance

MECIR Reporting

Abstract, Main results: number of studies and participants

R9, Mandatory

Report the number of included studies and participants.

Details

Abstract, Main results: study characteristics

R10, Highly desirable

Provide a brief description of key characteristics that will determine the applicability of the body of evidence (e.g. age, severity of condition, setting, study duration).

Details

Abstract, Main results: bias assessment

R11, Mandatory

Provide a comment on the findings of the bias assessment.

Details

Abstract, Main results: findings

R12, Mandatory

Report findings for all primary outcomes, irrespective of the strength and direction of the result, and of the availability of data.

Details

Abstract, Main results: adverse effects

R13, Mandatory

Ensure that any findings related to adverse effects are reported. If adverse effects data were sought, but availability of data was limited, this should be reported.

Details

Abstract, Main results: format of numerical results

R14, Mandatory

Present summaries of statistical analyses in the same way as they are reported in the review and in a standard way, ensuring that readers will understand the direction of benefit and the measurement scale used, and that confidence intervals are included where appropriate.

Details

Abstract, Main results: interpretability of findings

R15, Highly desirable

Ensure that key findings are interpretable, or are re-expressed in an interpretable way. For instance, they might be re-expressed in absolute terms (e.g. assumed and corresponding risks, NNTs, group means), and outcomes combined with a standardized scale (e.g. SMD) might be re-expressed in units that are more naturally understood.

Details

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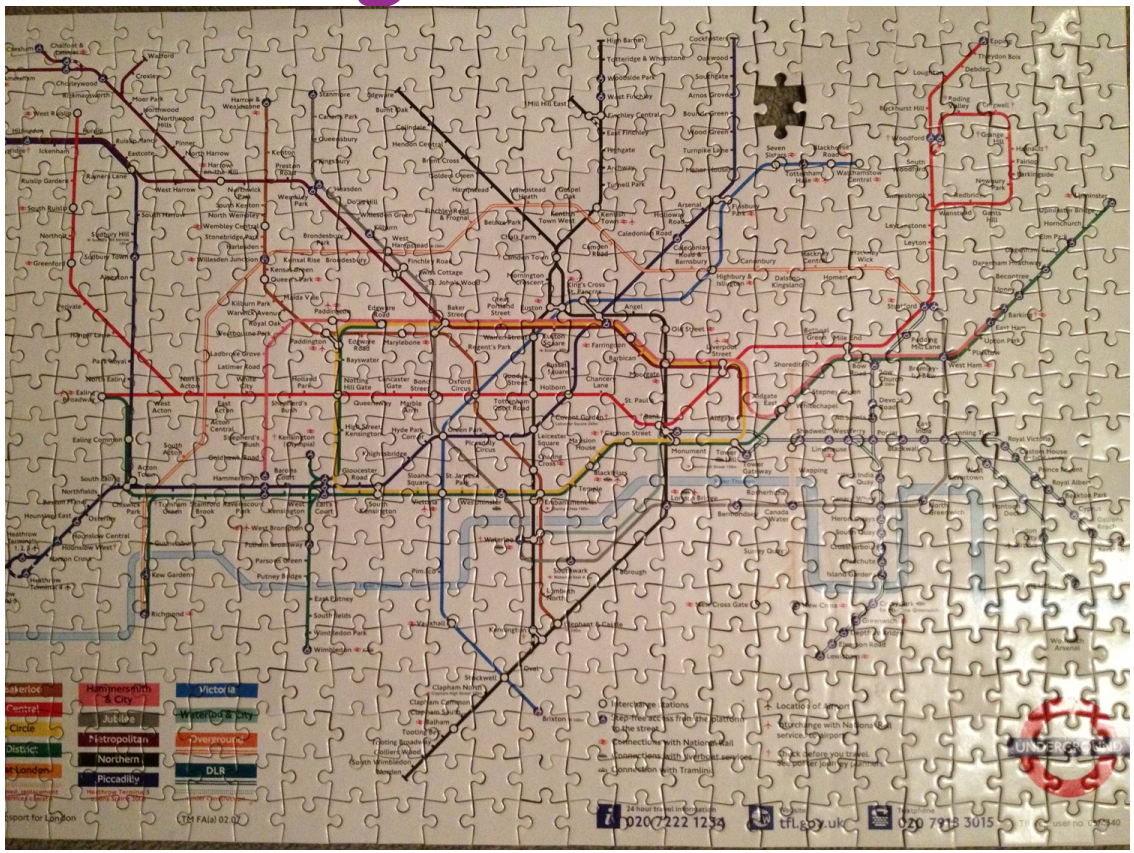
Screening

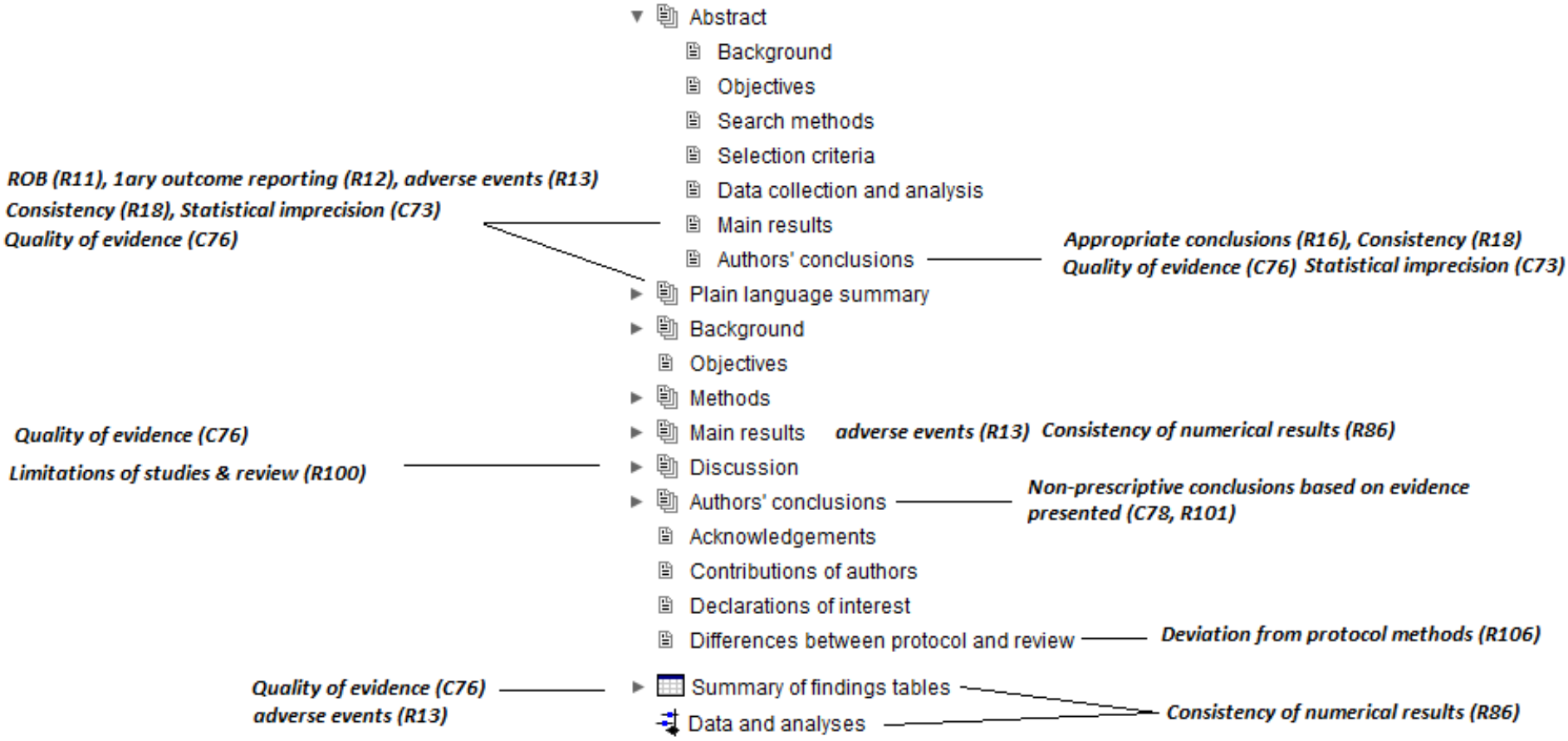


Spot the missing piece

Item No.	Item name	Standard	Met?	Comment
	Implementation of protocol methods			
C27	***Searching trials registers***	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.		
C37	***Rerunnir***			
C40	***Excludin without data***			
C68	***Compari subgroup***			

Item No.	Item name	Standard	Met?	Comment
C76	***Assessing the quality of the body of evidence***	Use the five GRADE considerations (study limitations, consistency of effect, imprecision, indirectness and publication bias) to assess the quality of the body of evidence for each outcome, and to draw conclusions about the quality of evidence within the text of the review.		
R97	***'Summary of findings' table***	Present a 'Summary of Findings' table according to recommendations described in Chapter 11 of the Cochrane Handbook (version 5 or later). Specifically: include results for one clearly defined population group (with few exceptions); indicate the intervention and the comparison intervention; include seven or fewer patient-important outcomes; describe the outcomes (e.g. scale, scores, follow-up);		
C73	***Interpreting results***	Interpret a statistically non-significant P value (e.g. larger than 0.05) as a finding of uncertainty unless confidence intervals are sufficiently narrow to rule out an important magnitude of effect.		
C78	***Formulating implications for practice***	Base conclusions only on findings from the synthesis (quantitative or narrative) of studies included in the review.		
R101	***Implicat practice***			

Item No.	Item name	Standard	Met?	Comment
	Completeness of reporting in the abstract & Internal consistency			
R11	***Abstract, Main results: bias assessment***	Provide a comment on the findings of the bias assessment.		
R12	***Abstract, Main results: findings***	Report findings for all primary outcomes, irrespective of the strength and direction of the result, and of the availability of data.		
R13	***Abstract, Main results: adverse effects***	Ensure that any findings related to adverse effects are reported. If adverse effects data were sought, but availability of data was limited, this should be reported.		
R18	***Consistency of summary versions of the review***	Ensure that reporting of objectives, important outcomes, results, caveats and conclusions is consistent across the text, the abstract, the plain language summary and the 'Summary of findings' table (if included).		
R86	***Consistency of results***	Ensure that all statistical results presented in the main review text are consistent between the text and the 'Data and analysis' tables.		


Abstract
Background
Objectives
Search methods
Selection criteria
Data collection and analysis
Main results
Authors' conclusions
Plain language summary
Background
Objectives
Methods
Main results
Discussion
Authors' conclusions
Acknowledgements
Contributions of authors
Declarations of interest
Differences between protocol and review
Summary of findings tables
Data and analyses
ROB (R11), 1ary outcome reporting (R12), adverse events (R13)
Consistency (R18), Statistical imprecision (C73)
Quality of evidence (C76)
Appropriate conclusions (R16), Consistency (R18)
Quality of evidence (C76) Statistical imprecision (C73)
Quality of evidence (C76)
Limitations of studies & review (R100)
adverse events (R13)
Consistency of numerical results (R86)
Non-prescriptive conclusions based on evidence presented (C78, R101)
Deviation from protocol methods (R106)
Quality of evidence (C76)
adverse events (R13)
Consistency of numerical results (R86)

Key learning points

Implementation of protocol methods	Interpretation	Inconsistency
Excluding studies due to outcome reporting Unacknowledged departures from protocol Subgroups (misuse & interpretation) Analysis errors	SoF tables footnotes/ downgrading decisions Use of GRADE Prescriptive conclusions	Results in text/tables Mismatch between full-text & summary versions

Feedback loop for MECIR

CEU screening programme: Overview of common errors & good practice in Cochrane intervention reviews

Since September 2013, the CEU has been responsible for pre-publication screening of new intervention reviews. Based on these experiences this resource has been compiled to draw attention to the most prominent challenges faced by authors and editors in the production of Cochrane Reviews. Where possible it also identifies how they might be addressed.

Toby Lasserson, Senior Editor

Section of the review	*Common error*	*Good practice*
Global	Unclear or misleading title.	Clear link between the review title and review question.
	In empty reviews, too much prominence can be given to findings from ineligible studies, or extrapolation of positive results from other reviews.	Emphasis on the lack of evidence to address the review question and acknowledgement of any ongoing studies.
	Inconsistent messages across conclusions, PLS, Discussion & implications for practice & research.	Using GRADE ratings to inform the review abstract, Summary of Findings (SoF) tables, PLS, Effects of interventions, Discussion (especially quality of evidence) and conclusions.
Abstract main results	Primary outcomes and harms under-reported, often with emphasis on positive secondary endpoints.	Reporting main outcomes of interest irrespective of the strength of evidence. As a general approach, outcomes important enough to feature in the Summary of Findings table should be considered for the abstract and vice versa.

Feedback loop for MECIR

Incorporating GRADE in Cochrane Reviews: Feedback from the CEU screening programme

1. Describing methods for assessing the quality of the evidence under the '*Data collection & analysis*' section of protocols and full reviews.
2. Explaining decisions about the quality of the evidence in reporting of results.
3. Incorporating information about the quality of evidence in the Discussion.
4. Drawing on quality of evidence ratings when summarising and interpreting the results e.g. abstracts, plain language summaries and implications for practice sections.

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MECIR 2.0

Of sets & standards…

New developments

4 sets (conduct; reporting protocol; reporting review & updating)

Booklet format

Standards revised to reflect what screening has taught us

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Standard
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and the *p*

Contents

Changes to conduct standards

5 fewer conduct standards (75 versus 80)

Surviving standards draw on learning points from screening & related audit work

C756 Assessing the quality of the body of evidence		Mandatory
Use the five GRADE considerations (risk of biasstudy limitations, consistency of effect, imprecision, indirectness and publication bias) to assess the quality of the body of evidence for each outcome, and to draw conclusions about the quality of evidence within the text of the review.	GRADE is the most widely used approach system for summarizsing confidence in effects of the interventions by outcome across studies. It is preferable to use the GRADE tool (as implemented in GRADEprofiler or GDT and described in the help system of the software). This should help to ensure that author teams are accessing the same information to inform their judgments. Ideally, two people working independently should assess the quality of the body of evidence and reach a consensus view on any downgrading decisions. The five GRADE considerations should be addressed irrespective of whether the review includes a 'Summary of fFFindings' table. It is helpful to draw on this information in the Discussion, in the conclusions and to convey the certainty in the evidence in the abstract and Plain Language Summary. See *Handbook* 12.2	

C789 Avoiding recommendations		Mandatory
Avoid providing recommendations for practice.	Cochrane Intervention Rreviews should not attempt to tell people which interventions should or should not be used, since local considerations may be relevant. However, the implications of the findings should be discussed, and decision-making can be helped by laying out different scenarios. See *Handbook* 12.7.2	
C7980 Formulating implications for research		Highly desirable
Structure the implications for research to address the nature of evidence required, including population intervention comparison, outcome, and type of study.	Anyone wishing to conduct a study in the topic area of the review should be provided with a clear sense of what the remaining uncertainties are. A useful framework for considering implications for research is EPICOT (evidence, population, intervention, comparison, outcome and time stamp). See *Handbook* 12.7.3	

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New set for reporting protocol

44 standards to mirror Conduct Standards

Investing effort in formulating question

Background

Standard	Rationale and elaboration
PR3 Background **Mandatory**	
Provide a concise description of the condition or problem addressed by the review question, definition of the intervention and how it might work, and why it is important to do the review. Include the four standard he	Systematic reviews should have a clearly defined and well-reasoned rationale which has been developed in the context of existing knowledge. Outlining the context of the review question is useful to readers and helps to establish key uncertainties that the review intends to address
PR14 Outcome domains of interest **Mandatory**	
State which outcomes are primary outcomes and which are secondary outcomes,	Up to seven outcomes should be pre-specified for inclusion in a 'Summary of findings' table (see PR40); it may be convenient to highlight them here.
PR39 Quality of the evidence **Mandatory**	
State the methods to be used to assess the quality of the body of evidence (using the five GRADE considerations).	If the current GRADE guidance for these assessments will be followed in its entirety (see *Handbook* Chapter 12), then a reference to this is sufficient to provide the criteria used to make judgements. *MECIR conduct standard 74 (*Use the five GRADE considerations (risk of bias, consistency of effect, imprecision, indirectness and publication bias) to assess the quality of the body of evidence for each outcome, and to draw conclusions about the quality of evidence within the text of the review.)
PR40 'Summary of findings' table **Mandatory**	
State which outcomes and which comparisons are intended to be included in a 'Summary of findings' table.	Up to a maximum of seven important outcomes should be pre-specified for inclusion in a 'Summary of findings' table. If possible, sources of any assumed risks to be presented in a 'Summary of findings' table should be explained. *MECIR conduct standard 23* (Plan in advance the methods to be used for assessing the quality of the body of evidence, and summarizing the findings of the review.)

Changes to reporting standards

Reporting standards revised to incorporate learning points from review screening

Clarification based on user feedback

R12	Abstract, Main results: findings	Mandatory
Report findings for all important ~~primary~~ outcomes, irrespective of the strength and direction of the result, and of the availability of data.	Findings should typically include concise information about the size of effect and quality of ~~the body of~~ evidence for the outcome (such as ~~study limitations~~risk of bias, consistency of effect, imprecision, indirectness and publication bias), for example using GRADE. Outcomes reported in the abstract should not be selected solely on the basis of the findings. In general, the same outcomes in the abstract should be presented in the Plain Language Summary and Summary of Findings tables. If no studies measured the ~~primary~~ outcome~~s~~, then a comment should be made to that effect.	

R99~~100~~	Limitations	Mandatory
Discuss limitations of the review at study and outcome level (e.g. regarding risk of bias), and at review-level (e.g. incomplete identification of studies, reporting bias).	Review authors must explicitly state the limitations of their review. One aspect that is easily overlooked is that of adverse effects. In particular, if the review methods do not allow for detection of serious and/or rare adverse events, the review authors must explicitly state this as a limitation. Additional considerations here include currency and completeness of the search, completeness of data collection processes, assumptions regarding classification of interventions, outcomes or subgroups, and methods to account for missing data. *MECIR conduct standard 74* (Consider the potential impact of reporting biases on the results of the review or the meta-analyses it contains.) [PRISMA item 25]	

Updating

Challenge notion that updating = adding studies

Start with a re-evaluation of the original research question (new protocol if necessary)

Separation of standards between planning & considerations for reporting

DECIDING ON AND PERFORMING AN UPDATE

Planning the update

Standard	Rationale and elaboration
U1 Reconsidering review questions	**Mandatory**
Confirm or amend review question (PICO) and objectives.	Consider whether it is important to modify or add new objectives to make the review relevant to its users. Consider whether the review will be split, merged with another review or otherwise changed substantially. If so, a new protocol might be warranted and the *MECIR conduct standards* should be followed rather than these *update standards*. It will be necessary to agree the approach to updating the review with the Cochrane Review Group.

U3 Reconsidering eligibility criteria

Confirm or amend eligibility criteria.

U11 Assessing quality of the evidence

Assess quality of evidence using GRADE considerations of risk of bias, inconsistency, imprecision, indirectness and publication bias.

U2 Reconsidering outcomes

Confirm or amend outcomes of interest.

U5 Reconsidering data collection and analysis methods

Consider whether methods for data collection and analysis (including a GRADE assessment) need to be amended in the light of recent methodological developments.

U4 Planning the search

Decide appropriate search methods.

UR2 Changes to scope	
Explain any changes to questions, objectives or eligibility criteria.	

UR4 Flow of studies	**Mandatory**
Flow of studies	Provide information on the flow of studies into the updated review, ideally using a flow diagram. There are two broad options for providing information about how studies were identified that are included in the updated version of the 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.

UR7 What's new?	**Mandatory**
Explain what's new.	It is important that changes are explained to inform returning readers about what's new. This should be achieved in several ways. A comment should be inserted to explain that the review is an update of a previously published review. This might be placed at the beginning or end of the Background or the start of the section 'Search methods for identification of studies'. It can be helpful to explain also whether the article describes the first, second, third and so on update of the review. Changes in review questions, eligibility criteria and methods should be reported in the section 'Differences between protocol and review', making it clear that they are changes since the previous version.

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Where next?

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Supporting implementation

Finalise & circulate the final sets as booklet

Handbook & software integration

Update learning resources

Produce targeted guidance on aspects of conduct & reporting that pose greatest challenge

Summary

MECIR should not be seen in isolation from Handbook guidance

Shared ownership

Some standards easier to attain than others

Recent changes encourage earlier adherence to standards & reinforce good practice