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Standards for REPORTING of new Cochrane Intervention reviews (R1-109)

Key points & Introduction

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Key points

- Authors should consult the MECIR reporting standards before and during writing up of their review.
- The reporting standards are compatible with key reporting guidelines developed by different bodies, including PRISMA.
- Abstracts and Plain language summaries need to be consistent with each other, and with the main text of the review.
- Clear and consistent reporting supports replication of systematic reviews and should make updating easier.

Authors should consult these reporting standards before and during writing up of their review. Adherence to the standards will help authors to prepare an informative, readable review. It will also help to make editorial evaluation of their work efficient. It is especially important to declare and justify differences to the planned question or eligibility criteria, since these may indicate important changes to the scope of the review. Where any search, data collection and analysis methods used are different from those planned, this also needs to be reported and explained. The reporting standards are available from within Review Manager (RevMan) software according to the heading or subheading to which they relate.

Several reporting guidelines are already available for primary studies and systematic reviews, and have been compiled by the [Equator Network](#)[1]. MECIR standards are compatible with the core items in two key sources of reporting guidance for systematic reviews: the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA), and the US Institute of Medicine's standards for systematic reviews.

Accurately summarizing the key findings of a Cochrane Review in its Abstract and Plain language summary serves an important purpose in knowledge translation. These standalone summaries help to convey the results of the review to a broad audience. Authors should take particular care to ensure that conclusions drawn in the main text of the review under 'Implications for practice' and 'Implications for research' take account of the strength of evidence presented in the review, and are appropriately distilled in the Abstract and Plain language summary.

Authors and editors should ensure that all parts of the review are succinct and readable, so that someone who is not an expert in the area can understand it. The published review needs to signpost and structure information clearly to help orientate readers. Review methods should be reported in sufficient detail that others are in principle able to reproduce the findings. Clear reporting of the eligibility criteria and methods will also help future efforts to update and maintain the published version of the review.

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[1] [The Equator Network](#) is a Library for health research reporting that provides a searchable database.

Reporting review conduct (R1-55)

Title & Authors (R1-2)

Title & Authors

	Standard	Rationale and elaboration	Resources
R1	<i>Format of title</i>	<i>Highly desirable</i>	
	Follow the standard template for a		See <i>Handbook</i>

	Cochrane Review title		Table 4.2.a Cochrane Training resource: defining the review question
R2	<i>Authors</i>	Mandatory	
	List names and affiliations of all authors		See <i>Handbook 4.2.2</i> Cochrane Training resource: writing a protocol

Abstract (R3-18)

Abstract

Cochrane Training resource: [common errors - summary versions of a review](#)

Cochrane Interactive Learning: [module 8 - reporting the review](#)

	Standard	Rationale and elaboration	Resources
R3	<i>Writing the Abstract</i>	Mandatory	
	Prepare a structured Abstract to provide a succinct summary of the review. In the interests of brevity it is highly desirable for authors to provide an Abstract of less than 700 words, and it should be no more than 1000 words in length.	Abstracts are a prominent, publicly accessible summary of the review that need to stand alone. They should convey key information about the review question and its findings, and be informative to readers.	
R4	<i>Abstract, Background</i>	Mandatory	
	Summarize the rationale and context of the review.		See <i>Handbook 11.8</i>
R5	<i>Abstract, Objectives</i>	Mandatory	
	State the main objective(s), preferably in a single concise sentence.	The objective(s) should be expressed in terms that relate to the population(s), intervention comparison(s) and, where appropriate, outcomes of interest.	See <i>Handbook 11.8</i>
R6	<i>Abstract, Search Methods</i>	Mandatory	
	Provide the date of the last search from which records were evaluated and that any studies identified were incorporated into the review, and an indication of the databases and other sources searched.	Abstracts should aim to give readers brief, but key, information about the comprehensiveness of the search and the currency of the information summarized by the review. The Abstract must include the month and year of the set of searches up to which the conclusions of the review are valid. This date 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). Abstracts do not need to report on recent repeat or 'catch-up' searches whose results have not been fully incorporated into the review. However, discretion should be applied if such searches identify a large body of evidence, the absence of which may affect the reliability of the conclusions.	

		<p>The amount of information regarding the search should be indicative of the process rather than provide specific details. In the interests of brevity certain details regarding the overall process may need to be moved to the full text of the review.</p> <p>Example: “CENTRAL, MEDLINE, Embase, five other databases and three trials registers were searched on [date] together with reference checking, citation searching and contact with study authors to identify additional studies”.</p>	
R7	<i>Abstract, Selection criteria</i>	Mandatory	
	Summarize eligibility criteria of the review, including information on study design, population and comparison.	Any extensions to eligibility criteria to address adverse effects, economic issues or qualitative research should be mentioned.	
R8	<i>Abstract, Data collection and analysis</i>	Mandatory	
	Summarize any noteworthy methods for selecting studies, collecting data, evaluating risk of bias and synthesizing findings. For many reviews it may be sufficient to state “We used standard methodological procedures expected by Cochrane.”	<p>This section of the Abstract should indicate the rigour of the methods that underpin the results reported subsequently in the Abstract. It does not need to replicate the detailed description of the methods given in the main text of the review.</p> <p>Details of how many people were involved in the screening process and collection of information about any included studies are not necessary in the Abstract. Key statistical methods may be given if not clear from the results that follow.</p> <p>The Abstract should prioritize the disclosure of non-standard approaches. For example, rather than disclosing all domains applied in the assessment of bias, notable variations on the standard approach should be given, such as use of non-standard tools.</p>	
R9	<i>Abstract, Main results: number of studies and participants</i>	Mandatory	
	Report the number of included studies and participants.	The total number of included studies should be stated. It might be appropriate to provide numbers of studies and participants for specific comparisons and main outcomes if the amount of evidence differs substantially from the total. Numbers of participants <i>analysed</i> should generally be presented in preference to numbers <i>recruited</i> (e.g. randomized); it is important to be clear which numbers are being reported. For some types of data there may be preferable alternatives to the number of participants (e.g. person-years of follow-up, number of limbs).	
R10	<i>Abstract, Main results: study characteristics</i>	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).	Summarizing the study characteristics will provide readers of the Abstract with important information about the applicability of the included studies. This is particularly important if the included studies reflect a subgroup of those eligible for inclusion in the review, for example, if the review intended to address the effects of interventions across all age groups, but included studies that only recruited adolescents.	
R11	<i>Abstract, Main results: bias assessment</i>	Mandatory	
	Provide a comment on the findings of the bias assessment.	The ‘Risk of bias’ assessments are a key finding and form a fundamental part of the strength of the conclusions drawn in the review. If risks of bias differ substantially for different comparisons and outcomes, this should be mentioned.	
R12	<i>Abstract, Main results: findings</i>	Mandatory	

	Report findings for all important 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 evidence for the outcome (such as 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 outcome, <i>then a comment should be made to that effect.</i>	Incorporating GRADE in Cochrane Reviews.
R13	<i>Abstract, Main results: adverse effects</i>	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.	The Abstract of the review should aim to reflect a balanced summary of the benefits and harms of the intervention.	See Handbook 11.8
R14	<i>Abstract, Main results: format of numerical results</i>	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.	The standard format for reporting the results of statistical analysis includes an indication of the summary measure, point estimate and confidence interval, e.g. odds ratio 0.75 (95% confidence interval 0.62 to 0.89).	
R15	<i>Abstract, Main results: interpretability of findings</i>	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, NNTBs, group means), and outcomes combined with a standardized scale (e.g. standardized mean difference) might be re-expressed in units that are more naturally understood.	Absolute effects provide a useful illustration of the likely impact of intervention, and are usually easier to understand than relative effects. Units expressed on a standardized scale reflect the effect estimate as the number of standard deviations. This is not intuitive to many readers who may be more familiar with specific scales. Any re-expressed findings must have been presented in the same way in the main text of the review (see previous standard).	
R16	<i>Abstract, Authors' conclusions</i>	Mandatory	
	State key conclusions drawn.	Authors' conclusions may include both implications for practice and implications for research. Care must be taken to avoid interpreting lack of evidence of effect as evidence of lack of effect. Recommendations for practice should be avoided.	See Handbook 12.7.4 See Handbook 11.8
R17	<i>Completeness of main review text</i>	Mandatory	
	Ensure that all findings reported in the Abstract and Plain language summary, including re-expressions of meta-analysis results, also appear in the main text of the review.		See Handbook 11.8, 11.9 Cochrane Training resource : Common errors - inconsistency &

			inaccuracy
R18	<i>Consistency of summary versions of the review</i>	Mandatory	
	Ensure that reporting of objectives, important outcomes, results, caveats and conclusions is consistent across the main text, the Abstract, the Plain language summary and the 'Summary of findings' table (if included).	Summary versions of the review should be written on the assumption that they are likely to be read in isolation from the rest of the review.	Cochrane Training resource: Common errors - inconsistency & inaccuracy

Background (R19-25)

Background

Cochrane Training resource: [writing a protocol](#)

Cochrane Interactive Learning: [module 2 - writing the review protocol](#)

	Standard	Rationale and elaboration	Resources
R19	<i>Background</i>	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.	Systematic reviews should have a clearly defined and well-reasoned rationale that 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	
R20	<i>Background headings</i>	Highly desirable	
	Include the four standard RevMan headings when writing the Background.	Four standard headings are included in RevMan ('Description of the condition', 'Description of the intervention', 'How the intervention might work', and 'Why it is important to do this review').	See <i>Handbook</i> 4.5
R21	<i>Background references</i>	Mandatory	
	Back up all key supporting statements with references.	Claims or statements regarding aspects such as disease burden, morbidity, prevalence and mechanisms of action should be substantiated and, where available, supported by external evidence.	
R22	<i>Main objective</i>	Mandatory	
	State the main objective, where appropriate in a single concise sentence.	<p>The primary objective of a Cochrane Review should be to assess the effects of one or more healthcare interventions on user-important outcomes, both intended and unintended. The objective should be expressed in terms that relate to the population(s), intervention comparison(s) and, where appropriate, to specify the outcomes of interest explicitly. Review users may be patients, carers, policy makers, clinicians, practitioners or others.</p> <p>MECIR conduct standard 2: Define in advance the objectives of the review, including participants, interventions, comparators and outcomes.</p> <p>Where possible, the format should be of the form "To assess the effects of <i>[intervention or comparison]</i> for <i>[health problem]</i> for/in <i>[types of people, disease or problem and setting]</i></p>	

		<i>if specified</i> ".	
R23	Secondary objectives	Highly desirable	
	State explicitly (as secondary objectives) any specific questions being addressed by the review, such as those relating to particular participant groups, intervention comparisons or outcomes.	The objectives should be expressed in terms that relate to the population(s), intervention comparison(s) and, where appropriate, outcomes of interest. MECIR conduct standard 4 : Consider in advance whether issues of equity and relevance of evidence to specific populations are important to the review, and plan for appropriate methods to address them if they are. Attention should be paid to the relevance of the review question to populations such as low-socioeconomic groups, low- or middle-income regions, women, children and older people.	
R24	Economic evidence	Mandatory	
	<i>If health economics evidence is being reviewed, state this explicitly in the Objectives (as a secondary objective).</i>	The primary aim of a Cochrane Review should be to assess the effects of one or more healthcare interventions on user-important outcomes, both intended and unintended. These outcomes may include economic outcomes. If health economics evidence is being reviewed as an integrated economics component, this should be stated as a secondary objective.	See Handbook 15.2.3 CIL: module 9 - introduction to health economics
R25	Qualitative research evidence	Mandatory	
	<i>If qualitative research evidence is being reviewed, state this explicitly in the Objectives (as a secondary objective).</i>	The primary aim of a Cochrane Review should be to assess the effects of one or more healthcare interventions on user-important outcomes, both intended and unintended. If qualitative research evidence is being included to 'extend' the review, this should be stated as a secondary objective.	See Handbook 20.2.1

Methods (R26)

Methods

	Standard	Rationale and elaboration	Resources
R26	Reference protocol	Highly desirable	
	Cite the protocol for the review.	The reader should be made aware that the review is based on a published protocol. This is particularly important if the review has been split into multiple reviews since the protocol was published. The most convenient place to reference the protocol for the review is under 'Other published versions of this review'. Since the protocol is usually no longer included in the CDSR once the review is published, it should be cited using the last publication citation for the protocol. Archived versions of protocols can be accessed via the current version of the review.	

Criteria for considering studies for this review (R27-32)

Criteria for considering studies for this review

Cochrane Training resource: [defining the review question](#)

Cochrane Interactive Learning: [module 2 - writing the review protocol](#)

	Standard	Rationale and elaboration	Resources
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R27	<i>Eligibility criteria for types of study: study designs</i>	Mandatory	
	State eligible study designs, and provide a justification for the choice.	It is not necessary to explain why randomized trials are eligible (if that is the case), although it may be important to explain why other types of study meet the eligibility criteria of the review. MECIR conduct standard 9 : Define in advance the eligibility criteria for study designs in a clear and unambiguous way, with a focus on features of a study's design rather than design labels. MECIR conduct standard 11 : Justify the choice of eligible study designs.	
R28	<i>Eligibility criteria for types of study: study reports</i>	Mandatory	
	<i>If studies are excluded on the basis of publication status or language of publication, explain and justify this.</i>	Studies should be included irrespective of their publication status and language of publication, unless explicitly justified. MECIR conduct standard 12 : Include studies irrespective of their publication status, unless exclusion is explicitly justified.	
R29	<i>Eligibility criteria for types of participants</i>	Mandatory	
	State eligibility criteria for participants, including any criteria around location, setting, diagnosis or definition of condition and demographic factors, and how studies including subsets of relevant participants are addressed.	Any notable restrictions on the eligibility criteria of the review should be given and explained (e.g. exclusion of people under or over a certain age, specific settings of intervention). MECIR conduct standard 5 : Define in advance the eligibility criteria for participants in the studies. MECIR conduct standard 6 : Define in advance how studies that include only a subset of relevant participants will be addressed.	
R30	<i>Eligibility criteria for types of interventions</i>	Mandatory	
	State eligibility criteria for interventions and comparators, including any criteria around delivery, dose, duration, intensity, co-interventions and characteristics of complex interventions.	MECIR conduct standard 7 : Define in advance the eligible interventions and the interventions against which these can be compared in the included studies.	
R31	<i>Role of outcomes</i>	Mandatory	
	<i>If measurement of particular outcomes is used as an eligibility criterion, state and justify this.</i>	Studies should never be excluded from a review solely because no outcomes of interest are reported. However, on occasion it will be appropriate to include only studies that measured particular outcomes. For example, a review of a multi-component public health intervention promoting healthy lifestyle choices, focussing on reduction in smoking prevalence, might legitimately exclude studies that do not measure smoking rates. MECIR conduct standard 8 : Clarify in advance whether outcomes listed under 'Criteria for considering studies for this review' are used as criteria for including studies (rather than as a list of the outcomes of interest within whichever studies are included).	
R32	<i>Outcomes of interest</i>	Mandatory	
	State primary and secondary outcomes of interest to the review, and define acceptable ways of measuring them.	Explain how multiple variants of outcome measures (e.g. definitions, assessors, scales, time points) are addressed. MECIR conduct standard 14 : Define in advance which outcomes are primary outcomes and which are secondary	

outcomes.

Also [MECIR conduct standards 15–18](#)

Search methods for identification of studies (R33-38)

Search methods for identification of studies

Cochrane Training resource: [searching for studies](#)

Cochrane Interactive Learning: [module 3 - searching for studies](#)

	Standard	Rationale and elaboration	Resources
R33	<i>Search sources</i>	Mandatory	
	List all sources searched, including: databases, trials registers, websites and grey literature. Database names should include platform or provider name (or both), and dates of coverage; websites should include full name and URL. State whether reference lists were searched and whether individuals or organizations were contacted.	<p>MECIR conduct standard 36: Document the search process in enough detail to ensure that it can be reported correctly in the review.</p> <p>Also MECIR conduct standards 24–31</p>	
R34	<i>Latest searches</i>	Mandatory	
	Provide the date of the last search and the issue or version number (where relevant) for each database for which results were evaluated and incorporated into the review. If a search was rerun prior to publication, and its results were not incorporated, explain how the results were dealt with, and provide the date of the search.	<p>The review should provide the search date up to which studies have been retrieved and assessed for inclusion. This is the date 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).</p> <p>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.</p> <p>If a 'catch-up' search was run subsequent to the review being written up, any relevant studies not yet assessed for inclusion should be listed in the section 'Studies awaiting assessment'.</p> <p>MECIR conduct standard 37: 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.</p> <p>MECIR conduct standard 38: Incorporate fully any studies identified in the rerun or update of the search within 12 months before publication of the review or review update.</p>	
R35	<i>Search restrictions</i>	Mandatory	
	Specify and justify any restrictions	MECIR conduct standard 35 : Justify the use of any restrictions	

	placed on the time period covered by the search.	in the search strategy on publication date or publication format.	
R36	<i>Searches for different types of evidence</i>	Mandatory	
	<i>If the review has specific eligibility criteria concerning inclusion of additional studies such as studies of adverse effects, health economics evidence or qualitative research evidence, describe search methods for identifying such studies.</i>	Some reviews extend beyond a focus on the effects of healthcare interventions and address specific additional types of evidence. These are discussed in Chapters 14, 15 and 20 of the Handbook. MECIR conduct standard 26 : <i>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.</i>	
R37	<i>Search strategies for bibliographic databases</i>	Mandatory	
	Present the exact search strategy (or strategies) used for each database in an Appendix, including any limits and filters used, so that it could be replicated.	Search strategies that are available elsewhere (e.g. standard methodological filters, or strategies used to populate a specialized register) may be referenced rather than reproduced. Including the number of hits for each line in the strategy is optional. 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 32–35 .	
R38	<i>Search strategies for other sources</i>	Highly desirable	
	Report the search terms used to search any sources other than bibliographic databases (e.g. trials registers, the web), and the dates of the searches.	Some of this information might be better placed in an Appendix. MECIR conduct standard 36 : Document the search process in enough detail to ensure that it can be reported correctly in the review.	

Data collection & analysis (R39-55)

Data collection & analysis

	Standard	Rationale and elaboration	Resources
R39	<i>Inclusion decisions</i>	Mandatory	
	State how inclusion decisions were made (i.e. from search results to included studies), clarifying how many people were involved and whether they worked independently.	MECIR conduct standard 39 : Use (at least) two people working independently to determine whether each study meets the eligibility criteria, and define in advance the process for resolving disagreements.	Cochrane Training resource: selecting studies CIL: module 4 - selecting studies and collecting data
R40	<i>Data collection process</i>	Mandatory	
	State how data were extracted from reports of included studies, clarifying how many people were involved, whether they worked independently, and how disagreements were resolved. Describe data collection process for any reports requiring translation.	MECIR conduct standard 43 : Use a data collection form that has been piloted. MECIR conduct standard 45 : Use (at least) two people working independently to extract study characteristics from reports of each study, and define in advance the process for resolving disagreements.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data

R41	<i>Requests for data</i>	Highly desirable	
	Describe attempts to obtain or clarify data from individuals or organizations.	MECIR conduct standard 49 : Seek key unpublished information that is missing from reports of included studies.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R42	<i>Data items</i>	Mandatory	
	State the types of information that were sought from reports of included studies.	MECIR conduct standard 44 : Collect characteristics of the included studies in sufficient detail to populate a table of 'Characteristics of included studies'.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R43	<i>Transformations of data</i>	Mandatory	
	Explain any transformations of reported data prior to presentation in the review, along with any assumptions made. Explain any procedures for extracting numeric data from graphs.	MECIR conduct standard 47 : Collect and utilize the most detailed numerical data that might facilitate similar analyses of included studies. Where 2x2 tables or means and standard deviations are not available, this might include effect estimates (e.g. odds ratios, regression coefficients), confidence intervals, test statistics (e.g. t, F, Z, Chi ²) or P values, or even data for individual participants.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R44	<i>Missing outcome data</i>	Highly desirable	
	Explain how missing outcome data were addressed.	Describe how assumptions are applied for missing data, e.g. last observation carried forward, or assumptions of particular values such as worst-case or best-case scenarios.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R45	<i>Tools to assess risk of bias in individual studies</i>	Mandatory	
	State and reference the tool(s) used to assess risk of bias for included studies, how the tool(s) was implemented, and the criteria used to assign studies to judgements of low risk, high risk and unclear risk of bias.	If the <i>Handbook</i> guidance for undertaking 'Risk of bias' assessments was followed in its entirety, then a reference to the <i>Handbook</i> is sufficient to provide the criteria used to assign judgements (see <i>Handbook</i> Sections 8.9 to 8.15). Justify any deviations from the tool. MECIR conduct standard 52 : Assess the risk of bias for each included study. For randomized trials, the Cochrane 'Risk of bias' tool should be used, involving judgements and supports for those judgements across a series of domains of bias, as described in Chapter 8 of the <i>Handbook</i> (version 5 or later). MECIR conduct standards 53 – 61	Cochrane Training resources: assessing RoB included studies and RoB 2.0 webinar CIL: module 5 - introduction to study quality and risk of bias
R46	<i>Effect measures</i>	Mandatory	
	State the effect measures used by the review authors to describe effect sizes (e.g. risk ratio, mean difference) in any included studies or meta-analyses, or both.		Cochrane Training resources: analysing dichotomous outcomes and analysing continuous outcomes CIL: module 6 - analysing the data

R47	Non-standard designs	Mandatory	
	If designs other than individually randomized, parallel-group randomized trials are included, describe any methods used to address clustering, matching or other design features of the included studies.	MECIR conduct standard 70 : Consider the impact on the analysis of clustering, matching or other non-standard design features of the included studies.	Cochrane Training resource: analysing non-standard data & study designs CIL: module 6 - analysing the data
R48	Studies with more than two groups	Mandatory	
	If multi-arm studies are included, explain how they were addressed and incorporated into syntheses.	MECIR conduct standard 66 : If multi-arm studies are included, analyse multiple intervention groups in an appropriate way that avoids arbitrary omission of relevant groups and double-counting of participants.	Cochrane Training resource: analysing non-standard data & study designs CIL: module 6 - analysing the data
R49	Assessing heterogeneity	Mandatory	
	Describe the methods used to identify the presence of heterogeneity between the studies in the review (e.g. non-quantitative assessment, I ² , Tau ² or statistical test).	MECIR conduct standard 69 : Take into account any statistical heterogeneity when interpreting the results, particularly when there is variation in the direction of effect. MECIR conduct standard 62 : Undertake (or display) a meta-analysis only if participants, interventions, comparisons and outcomes are judged to be sufficiently similar to ensure an answer that is clinically meaningful. MECIR conduct standard 63 : Assess the presence and extent of between-study variation when undertaking a meta-analysis.	Cochrane Training resource: exploring heterogeneity CIL: module 6 - analysing the data
R50	Risk of reporting bias across studies	Highly desirable	
	Describe any methods used for assessing the risk of reporting biases such as publication bias.		Cochrane Training resource: small study effects & reporting biases CIL: module 7 - interpreting the findings
R51	Data synthesis	Mandatory	
	Describe any methods used for combining results across studies. Where data have been combined in statistical software external to RevMan, reference the software, commands and settings used to run the analysis.	Decisions to depart from intended methods, for example an alternative statistical model, should be reported and justified. MECIR conduct standard 62 : Undertake (or display) a meta-analysis only if participants, interventions, comparisons and outcomes are judged to be sufficiently similar to ensure an answer that is clinically meaningful.	Cochrane Training resource: intro to meta-analysis CIL: module 6 - analysing the data
R52	Subgroup analyses	Mandatory	
	If subgroup analysis (or meta-regression) was performed, state the potential effect modifiers with rationale for each, stating whether each was defined a priori or post hoc and how they were compared (e.g. statistical tests).	MECIR conduct standard 22 : Predefine potential effect modifiers (e.g. for subgroup analyses) at the protocol stage, restrict these in number, and provide rationale for each. MECIR conduct standard 67 : If subgroup analyses are to be compared, and there are judged to be sufficient studies to do this meaningfully, use a formal statistical test to compare them.	Cochrane Training resource: exploring heterogeneity CIL: module 6 - analysing the data
R53	Addressing risk of bias	Mandatory	
	Describe how studies with high or variable risks of bias are addressed in	MECIR conduct standard 59 : Address risk of bias in the synthesis (whether quantitative or non-quantitative). For	Cochrane Training resources: assessing

	the synthesis.	example, present analyses that are stratified according to summary risk of bias, or restricted to studies at low risk of bias.	RoB included studies and RoB 2.0 webinar CIL: module 6 - analysing the data
R54	<i>Sensitivity analysis</i>	Mandatory	
	State the basis for any sensitivity analyses performed.	MECIR conduct standard 71 : Use sensitivity analyses to assess the robustness of results, such as the impact of notable assumptions, imputed data, borderline decisions and studies at high risk of bias.	Cochrane Training resources: assessing RoB included studies and exploring heterogeneity CIL: module 6 - analysing the data
R55	<i>Summary of findings</i>	Highly desirable	
	State any methods for summarizing the findings of the review, including the assessment of the quality of the body of evidence for each outcome.	MECIR conduct standard 75 (Include a 'Summary of Findings' table according to recommendations described in Chapter 10 of the Cochrane Handbook (version 5 or later). Specifically: <ul style="list-style-type: none"> • include results for one 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); • indicate the number of participants and studies for each outcome; • present at least one baseline risk for each dichotomous outcome (e.g. study population or median/medium risk) and baseline scores for continuous outcomes (if appropriate); • summarize the intervention effect (if appropriate); and • include a measure of the quality of the body of evidence) MECIR conduct standard 76 (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.) [PRISMA item 12]	Common issues in Summary of Findings tables. Incorporating GRADE in Cochrane Reviews. CIL: module 7 - interpreting the findings CIL: module 8 - reporting the review

Results (R56-109)

Description of studies (R56-72)

Description of studies

	Standard	Rationale and elaboration	Resources
R56	<i>Flow of studies</i>	Mandatory	
	Provide information on the flow of studies from the number(s) of	MECIR conduct standard 41 : Document the selection process in sufficient detail to complete a PRISMA flow chart	Cochrane Training resource: searching

	references identified in the search to the number of studies included in the review, ideally using PRISMA type flow diagram. Clarify how multiple references for the same study relate to the individual studies.	and a table of 'Characteristics of excluded studies'. MECIR conduct standard 42 : Collate multiple reports of the same study, so that each study, rather than each report, is the unit of interest in the review.	for studies CIL: module 4 - selecting studies and collecting data
R57	Lack of included studies	Highly desirable	
	If a review identifies no eligible studies, restrict the Results section to a description of the flow of studies and any brief comments about reasons for exclusion of studies.	Under 'Risk of bias in included studies' and 'Effects of interventions', state "No study met the eligibility criteria". Any discussion of evidence not meeting the eligibility criteria of the review should be in the Discussion section.	
R58	Excluded studies	Mandatory	
	List key excluded studies and provide justification for each exclusion.	The table of 'Characteristics of excluded studies' is intended as an aid to users rather than a comprehensive list of studies that were identified but not included. List here any studies that a user might reasonably expect to find in the review to explain why they are excluded.	See <i>Handbook 7.2.5</i> Cochrane Training resource: selecting studies CIL: module 4 - selecting studies and collecting data
R59	Studies awaiting classification	Highly desirable	
	List the characteristics of any completed studies that have been identified as potentially eligible but have not been incorporated into the review.	Users of the review will be interested to learn of any potentially relevant studies that have been conducted and are known to the review team, but have not yet been incorporated in to the review irrespective of their publication status. This will help them to assess the stability of the review findings. These should be listed in the table of 'Characteristics of studies awaiting classification', along with any details that are known. Authors should also consider the impact of not including these studies on the review findings as a potential limitation, and the extent to which they affect the implications for research.	Cochrane Training resource: searching for studies CIL: module 3 - searching for studies
R60	Ongoing studies	Mandatory	
	Provide details of any identified studies that have not been completed.	Users of the review will be interested to learn of any potentially relevant studies that have not been completed. This will help them to assess the stability of the review findings. These should be listed in the table of 'Characteristics of ongoing studies', along with any details that are known. Cochrane Reviews should be mindful of research waste so it is useful to consider how ongoing studies might address the review question under 'Implications for research'.	Cochrane Training resource: searching for studies CIL: module 3 - searching for studies
R61	Table of 'Characteristics of included studies'	Mandatory	
	Present a table of 'Characteristics of included studies' using a uniform format across all studies.	MECIR conduct standard 44 : Collect characteristics of the included studies in sufficient detail to populate a table of 'Characteristics of included studies'.	Cochrane Training resource: collecting data CIL: module 8 - reporting the review
R62	Included studies	Mandatory	
	Provide a brief narrative summary of any included studies. This should		See <i>Handbook 4.5</i>

	include the number of participants and a summary of the characteristics of the study populations and settings, interventions, comparators and funding sources.		CIL: module 8 - reporting the review
R63	<i>Table of 'Characteristics of included studies': methods</i>	Mandatory	
	Provide the basic study design or design features (e.g. parallel group randomized trial, cluster-randomized trial, controlled before and after study).	Even if the review is restricted to one study design, these tables should provide a comprehensive summary of each study. It is important that labels used to describe study designs are clearly defined in the review.	See <i>Handbook 13.2</i> Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R64	<i>Table of 'Characteristics of included studies': participants</i>	Mandatory	
	Provide sufficient information about the study populations to enable a user of the review to assess the applicability of the review's findings to their own setting.	Information presented in this table should reflect the baseline demographics of the study sample. In addition, it is helpful to state the eligibility criteria of the study.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R65	<i>Table of 'Characteristics of included studies': sample sizes</i>	Mandatory	
	Include the sample size for each included study in the table of 'Characteristics of included studies'.	If sample sizes are available for each intervention group, these should be included. A convenient place is often within the box for Interventions, e.g. inserting "(n =)" after each listed intervention group.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R66	<i>Table of 'Characteristics of included studies': interventions</i>	Mandatory	
	Provide sufficient information to enable users of the review to assess the applicability of the intervention to their own setting, and if possible in a way that allows the intervention to be replicated.	The components of all interventions (drug, non-drug, simple or complex) should be reported. Reporting guidelines have been developed for describing interventions used in primary research and review authors may find it useful to structure their description of interventions around the core attributes highlighted by TIDieR (Hoffman 2014). Lengthy explanations of interventions should be avoided. Citations to sources of detailed descriptions can be included.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R67	<i>Table of 'Characteristics of included studies': outcomes</i>	Mandatory	
	Provide clear and consistent information about outcomes measured (or reported), how they were measured and the times at which they were measured.	It should be clear whether main outcomes of interest in the review were measured in the study.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R68	<i>Table of 'Characteristics of included studies': dates</i>	Highly desirable	
	Include the dates when the study was	If dates are not available then this should be stated (e.g.	Cochrane Training

	conducted in the table of 'Characteristics of included studies'.	"Study dates not reported").	resource: collecting data CIL: module 4 - selecting studies and collecting data
R69	<i>Table of 'Characteristics of included studies': funding source</i>	Mandatory	
	Include details of funding sources for the study, where available.	Details of funding sources should be placed in this table rather than as part of the 'Risk of bias' table. Including an extra row in the table of 'Characteristics of included studies' is encouraged.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R70	<i>Table of 'Characteristics of included studies': declarations of interest</i>	Mandatory	
	Include details of any declarations of interest among the primary researchers.	Declarations of interest should be placed in this table rather than as part of the 'Risk of bias' table. Including an extra row in the table of 'Characteristics of included studies' is encouraged.	Cochrane Training resource: collecting data CIL: module 4 - selecting studies and collecting data
R71	<i>Choice of intervention groups in multi-arm studies</i>	Highly desirable	
	If a study is included with more than two intervention arms, restrict comments on any irrelevant arms to a brief comment in the table of 'Characteristics of included studies'.	Intervention arms that are not relevant to the review question should not be discussed in detail, although it is useful to clarify (in this table) that such arms were present. MECIR conduct standard 50 : If a study is included with more than two intervention arms, include in the review only intervention and control groups that meet the eligibility criteria.)	Cochrane Training resource: analysing non-standard data and study designs CIL: module 6 - analysing the data
R72	<i>References to included studies</i>	Mandatory	
	List all reports of each included study under the relevant Study ID.	It is important that all reports are listed, and are grouped by study. Marking one report as the primary reference is helpful where appropriate.	

Risk of bias in included studies (R73-75)

Risk of bias in included studies

Cochrane Training resource: [assessing RoB included studies](#) and [RoB 2.0 webinar](#)

Cochrane Interactive Learning: [module 5 - introduction to study quality and risk of bias](#)

	Standard	Rationale and elaboration	Resources
R73	<i>"Risk of bias" table</i>	Mandatory	
	Present a 'Risk of bias' table for each included study, with judgements about risks of bias, and explicit support for these judgements.	The 'Risk of bias' table in RevMan should be used, this is an extension of the table of 'Characteristics of included studies'. MECIR conduct standard 52 : Assess the risk of bias for each included study. For randomized trials, the Cochrane 'Risk of bias' tool should be used, involving judgements and	

		supports for those judgements across a series of domains of bias, as described in Chapter 8 of the <i>Handbook</i> (version 5 or later). Also MECIR conduct standards 54 – 61	
R74	<i>Summary assessments of risk of bias</i>	Highly desirable	
	Summarize the risk of bias across domains for each key outcome for each included study, and ensure that these are supported by the information presented in the 'Risk of bias' tables.	MECIR conduct standard 58 : Summarize the risk of bias for each key outcome for each study.	
R75	<i>Risk of bias in included studies</i>	Mandatory	
	Provide a brief narrative summary of the risks of bias among the included studies.	It may be helpful to identify any studies considered to be at low risk of bias for particular key outcomes.	

Effects of interventions (R76-99)

Effects of interventions

Cochrane Interactive Learning: [module 8 - reporting the review](#)

	Standard	Rationale and elaboration	Resources
R76	<i>Use of 'Data and analysis' headings</i>	Mandatory	
	Ensure appropriate use of the heading hierarchy of Comparisons, Outcomes, Subgroups and Study data in the 'Data and analysis' section.	Appropriate use of the hierarchy ensures consistency of structure across reviews. It is confusing for the user if outcomes are listed against the heading 'Comparison' and interventions listed against the heading 'Outcome or subgroup'.	
R77	<i>Presenting data</i>	Highly desirable	
	Ensure that simple summary data for each intervention group, as well as estimates of effect size (comparing the intervention groups), are available for each study for each outcome of interest to the review. These appear by default when dichotomous or continuous outcome data are analysed within RevMan.	Simple summaries such as numbers of events, means and standard deviations should be presented for each treatment group when available. This is achieved primarily by using the 'Data and analyses' section of the review, for dichotomous and continuous outcomes. For other outcomes, these should typically be presented in tables labelled 'Other data'. When data for each separate intervention group are available for outcomes analysed as 'generic inverse-variance' data, these might be presented in Additional tables.	
R78	<i>Number of studies and participants</i>	Mandatory	
	State how many studies and how many participants contributed data to results for each outcome, along with the proportion of the included studies and recruited participants potentially available for the relevant comparison.	It is unlikely that the same number of studies will contribute data to every outcome of interest. Specific studies may contribute different numbers of participants for different outcomes. Therefore, for each comparison, it is helpful to indicate to readers what proportion of the relevant included studies and recruited participants contribute data to each outcome. Failure to disclose this may be misleading.	
R79	<i>Source of data</i>	Highly desirable	
	State the source of all data presented in the review, in particular, whether it was obtained from published literature, by correspondence, from a	Transparency of data source enables validation or verification of data by others, including editors or readers of the review.	

	trials register, from a web-based data repository, etc.		
R80	Multiple outcome data	Mandatory	
	Describe any post hoc decisions that might give rise to accusations of selective outcome reporting, for example when there were multiple outcome measures (e.g. different scales), multiple time points or multiple ways of presenting results.	Transparent disclosure of post hoc decisions will enable readers of the review to assess the credibility of the results of the review for themselves. Post hoc decisions to change the definition or priority of outcome measures must be reported and justified under 'Differences between the protocol and review'. MECIR conduct standard 16 : Define in advance details of what are acceptable outcome measures (e.g. diagnostic criteria, scales, composite outcomes). MECIR conduct standard 17 : Define in advance how outcome measures will be selected when there are several possible measures (e.g. multiple definitions, assessors or scales). MECIR conduct standard 18 : Define in advance the timing of outcome measurement.	
R81	Ordering of results and 'Data and analysis' section	Highly desirable	
	Organize results to follow the order of comparisons and outcomes specified in the protocol, following in particular the distinction between primary and secondary outcomes.	Review authors must avoid selective reporting of analysis results in a way that depends on the findings. The best way to achieve this is to follow a well-structured protocol and present results as outlined in that protocol. However, sometimes a pragmatic decision needs to be made that an alternative arrangement is preferable, particularly with regard to comparisons. This choice should be explicitly justified.	
R82	Prespecified outcomes	Mandatory	
	Report synthesis results for all prespecified outcomes, irrespective of the strength or direction of the result. Indicate when data were not available for outcomes of interest, and whether adverse effects data were identified.	To avoid selective outcome reporting (in truth or in perception), the review should address all outcomes specified in the protocol.	
R83	Statistical uncertainty	Mandatory	
	Accompany all effect size estimates with a measure of statistical uncertainty (e.g. a confidence interval with a specified level of confidence such as 90%, 95% or 99%).	Confidence intervals are the preferred method for expressing statistical uncertainty.	Cochrane Training resource: intro to meta-analysis
R84	P values	Highly desirable	
	If reporting P values, provide exact P values (e.g. P = 0.08 rather than P > 0.05).	Effect estimates with confidence intervals are the preferred method of presenting numeric results. P values should not be used as an alternative to confidence intervals and should not be used to divide results into 'significant' or 'non-significant'; exact P values portray the strength of evidence against the null hypothesis.	See <i>Handbook</i> 12.4.2
R85	Tables and Figures	Mandatory	
	Link to each Table and Figure.	All tables and figures should have a brief descriptive caption and must be referred to in numerical order in the review text.	
R86	Number of Tables and Figures	Highly desirable	
	Keep the number of Tables and	Tables (typically implemented as Additional tables) and	

	Figures low to convey key findings without affecting the readability of the review text.	Figures (including RevMan flow charts, RevMan forest plots and imported graphics) may be added to reviews and included in the body of the text. Reviews should try and avoid including more than six such Tables and Figures in total. Further Tables and Figures can be included as supplementary material (e.g. as 'Data and analysis' forest plots or within Appendices).	
R87	Consistency of results	Mandatory	
	Ensure that all statistical results presented in the main review text are consistent between the text and the 'Data and analysis' tables.	Errors can be introduced, particularly when analyses are rerun.	
R88	Direction of effect	Mandatory	
	State whether findings indicate a clear direction of benefit.	Where results indicate that an intervention is better or worse than another intervention, it is important to make it clear which intervention is favoured. This is the case particularly when different scales are combined using standardized mean differences.	Cochrane Training resource: intro to meta-analysis
R89	Interpretability of results	Mandatory	
	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, NNTBs, group means), and outcomes combined with a standardized scale (e.g. standardized mean difference) might be re-expressed in units that are more naturally understood. If minimally important differences were prespecified or are available, these should be provided to aid interpretation.	Absolute effects provide a useful illustration of the likely impact of an intervention, and are usually easier to understand than relative effects. They may need to be accompanied, however, with information about assumed baseline risks. Confidence intervals should be presented for NNTBs and similar summary measures. Re-expressing relative effects as absolute effects often requires the specification of assumed (e.g. untreated) risks, and the source of these should be provided. Results expressed as standardized mean differences reflect the number of standard deviations' difference between mean responses. This is not intuitive to many readers who may be more familiar with specific scales. Ideally, minimally important effect sizes should be specified in the protocol.	Cochrane Training resources: analysing dichotomous outcomes and analysing continuous outcomes
R90	Studies without usable data	Mandatory	
	Comment on the potential impact of studies that apparently measured outcomes, but did not contribute data that allowed the study to be included in syntheses.	There is good evidence of selective outcome reporting among clinical trials. Outcomes that are believed to have been measured but are not reported in a usable format may therefore be systematically different from those that are usable, and introduce bias. 'Usable' in this sense refers both to incorporation in a meta-analysis and to consideration in non-statistical syntheses of findings. Authors might consider using a table to indicate which studies contributed data to the outcomes of interest in the review. MECIR conduct standard 40 : Include studies in the review irrespective of whether measured outcome data are reported in a 'usable' way.	
R91	Missing outcome data	Highly desirable	
	Discuss the implications of missing outcome data from individual participants (due to losses to follow-up or exclusions from analysis).	MECIR conduct standard 64 : Consider the implications of missing outcome data from individual participants (due to losses to follow-up or exclusions from analysis).	
R92	Skewed data	Highly desirable	
	Discuss the possibility and implications of skewed data when analysing continuous outcomes.	MECIR conduct standard 65 : Consider the possibility and implications of skewed data when analysing continuous outcomes.	Cochrane Training resource: analysing

			continuous outcomes CIL: module 6 - analysing the data
R93	<i>Forest plots</i>	Highly desirable	
	Present data from multiple studies in forest plots (using the 'Data and analyses' structure in RevMan) wherever possible, providing it is reasonable to do so.	Presenting data in forest plots can be useful, even if the studies are not combined in a meta-analysis.	Cochrane Training resource: intro to meta-analysis CIL: module 6 - analysing the data
R94	<i>Multiple subgroup analyses and sensitivity analyses</i>	Highly desirable	
	<i>If presenting multiple sensitivity analyses or different ways of subgrouping the same studies, present these in summary form (e.g. a single Table or Figure) and not in multiple forest plots.</i>		Cochrane Training resource: exploring heterogeneity CIL: module 6 - analysing the data
R95	<i>Labels on plots</i>	Mandatory	
	Label the directions of effect and the intervention groups in forest plots with the interventions being compared.	By default, RevMan currently uses 'experimental' and 'control' within labels. It is helpful to replace these with more specific intervention names, and essential if the ordering is swapped (or for head-to-head comparisons). Directions of effect should be used as consistently as possible within a review.	Cochrane Training resource: intro to meta-analysis CIL: module 6 - analysing the data
R96	<i>Risk of bias across studies</i>	Highly desirable	
	Present results of the assessment of risk of bias across studies (and across domains) for each key outcome, and state whether this leads to concerns about the validity of the review's findings.	Considerations of risk of bias across studies are required for assessments of the quality of the body of evidence (e.g. using GRADE).	Cochrane Training resources: assessing RoB included studies and RoB 2.0 webinar CIL: module 5 - introduction to study quality and risk of bias CIL: module 7 - interpreting the findings
R97	<i>Reporting biases</i>	Highly desirable	
	Present results of any assessment of the potential impact of reporting biases on the review's findings.	MECIR conduct standard 73 : Consider the potential impact of reporting biases on the results of the review or the meta-analyses it contains.	Cochrane Training resource: small study effects and reporting biases CIL: module 7 - interpreting the findings
R98	<i>'Summary of findings' table</i>	Mandatory	
	Present a 'Summary of findings' table according to recommendations described in Chapter 11 of the <i>Handbook</i> (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); indicate the number of participants and studies for each outcome; present at least one baseline risk for each dichotomous outcome (e.g. study	Cochrane Training resource: GRADE approach to evaluating evidence quality Incorporating GRADE in Cochrane Reviews

		<p>population or median/medium risk) and baseline scores for continuous outcomes (if appropriate); summarize the intervention effect (if appropriate); and include a measure of the quality of the body of evidence for each outcome.</p> <p>Efforts should be made to incorporate information presented in 'Summary of findings' tables (such as absolute effects, quality ratings and downgrading decisions) in other parts of the review including the Abstract, Plain language summary, Effects of interventions, Discussion and Authors' conclusions.</p>	CIL: module 8 - reporting the review
R99	<i>Assessments of the quality of the body of evidence</i>	Mandatory	
	<p>Provide justification or rationale for any measures of the quality of the body of evidence for each key outcome. If a 'Summary of findings' table is used, use footnotes to explain any downgrading or upgrading according to the GRADE approach.</p>	<p>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.</p> <p>MECIR conduct standard 75: Justify and document all assessments of the quality of the body of evidence (for example downgrading or upgrading if using GRADE).</p>	<p>Cochrane Training resource: GRADE approach to evaluating evidence quality</p> <p>Incorporating GRADE in Cochrane Reviews</p> <p>CIL: module 7 - interpreting the findings</p> <p>CIL: module 8 - reporting the review</p>

Discussion (R100-101)

Discussion

Cochrane Interactive Learning: [module 8 - reporting the review](#)

	Standard	Rationale and elaboration	Resources
R100	<i>Discussion headings</i>	Highly desirable	
	<p>Include the standard RevMan headings when writing the Discussion.</p>	<p>Five standard headings are included in RevMan ('Summary of main results', 'Overall completeness and applicability of evidence', 'Quality of the evidence', 'Potential biases in the review process', 'Agreements and disagreements with other studies or reviews').</p>	<p>See <i>Handbook 4.5</i></p>
R101	<i>Limitations</i>	Mandatory	
	<p>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).</p>	<p>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 or rare adverse events, or both, 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 made regarding classification of interventions, outcomes or subgroups, and methods used to account for missing data.</p> <p>MECIR conduct standard 74: Consider the potential impact of reporting biases on the results of the review or the meta-analyses it contains.</p>	

Authors' conclusions (R102-103)

Authors' conclusions

Cochrane Interactive Learning: [module 8 - reporting the review](#)

	Standard	Rationale and elaboration	Resources
R102	<i>Conclusions: implications for practice</i>	Mandatory	
	Provide a general interpretation of the evidence so that it can inform healthcare or policy decisions. Avoid making recommendations for practice.	When formulating implications for practice base conclusions only on findings from the synthesis (quantitative or narrative) of studies included in the review. The conclusions of the review should convey the essence of the synthesis of included studies, without selective reporting of the particular findings on the basis of the result, and without drawing on data that were not systematically compiled and evaluated as part of the review.	See <i>Handbook</i> 4.5 , 12.7 Incorporating GRADE in Cochrane Reviews.
R103	<i>Conclusions: implications for research</i>	Mandatory	
	<i>If recommending further research</i> , structure the implications for research to address the nature of evidence required, including population, intervention comparison, outcome, and type of study.	Researchers and research funders are an important user group of Cochrane Reviews. Recommendations for future research should offer constructive guidance on addressing the remaining uncertainties identified by the review. This is particularly important for reviews that identify few or no studies. Include any information about completed or ongoing studies that are likely to address the review question.	

Acknowledgements (R104)

Acknowledgements

	Standard	Rationale and elaboration	Resources
R104	<i>Acknowledgements</i>	Mandatory	
	Acknowledge the contribution of people not listed as authors of the review, including any assistance from the Cochrane Review Group, non-author contributions to searching, data collection, study appraisal or statistical analysis, and the provision of funding.		Cochrane Training resource: writing a protocol

Contribution of authors (R105)

Contribution of authors

	Standard	Rationale and elaboration	Resources
R105	<i>Contributions of authors</i>	Mandatory	
	Describe the contributions of each		See <i>Handbook</i> 4.2.2

	author to the review.		Cochrane Training resource: writing a protocol
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Declarations of interest (R106)

Declarations of interest

	Standard	Rationale and elaboration	Resources
R106	<i>Declarations of interest</i>	Mandatory	
	Report any present or recent (three years prior to declaration) affiliations or other involvement in any organization or entity with an interest in the review's findings that might lead to a real or perceived conflict of interest. Include the dates of the involvement.	<p>The full policy on conflicts of interest is available in the Cochrane Editorial and Publishing Policy Resource (EPPR). In brief, the nature and extent of the affiliation or involvement (whether financial or non-financial) should be described to promote transparency. Strategies to clarify how commercial and intellectual conflicts of interests (such as review authors who are trialists) were handled in the review process may be needed.</p> <p>Declarations of interest should be stated according to the relevant criteria from the International Committee of Medical Journal Editors (ICMJE), and must be consistent with interests declared on the Disclosure of Potential Conflicts of Interest form.</p>	<p>See Handbook 2.6</p> <p>Cochrane Training resource: writing a protocol</p>

Differences between protocol & review (R107-108)

Differences between protocol & review

	Standard	Rationale and elaboration	Resources
R107	<i>Changes from the protocol</i>	Mandatory	
	Explain and justify any changes from the protocol (including any post hoc decisions about eligibility criteria or the addition of subgroup analyses).	MECIR conduct standard 13 : Justify any changes to eligibility criteria or outcomes studied. In particular, post hoc decisions about inclusion or exclusion of studies should keep faith with the objectives of the review rather than with arbitrary rules.	
R108	<i>Methods not implemented</i>	Mandatory	
	Document aspects of the protocol that were not implemented (e.g. because no studies, or few studies, were found) in the section 'Differences between protocol and review', rather than in the Methods section.	Including a record of methods that were not implemented helps to retain specific details of the protocol. By doing so, the next version of the review can be seen to be coherent with what was planned in the protocol.	See <i>Handbook</i> 2.1

Sources of support (R109)

Sources of support

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	Standard	Rationale and elaboration	Resources
R109	<i>Sources of support</i>	Mandatory	
	List sources of financial and non-financial support for the review and the role of the funder, if any.		See <i>Handbook 4.10</i> Cochrane Training resource: writing a protocol

Reference

Reference

Hoffmann TC, Glasziou PP, Boutron I, Milne R, Perera R, Moher D, et al. (2014) Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. *BMJ* 2014;348:g1687. doi: [10.1136/bmj.g1687](https://doi.org/10.1136/bmj.g1687)

Citation

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