# Reporting review conduct (R1-55)

## Title & Authors (R1-2)

### Title & Authors

| | Standard | Rationale and elaboration | Resources |
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| R1 | *Format of title* | ***Highly desirable*** | |
| | Follow the standard template for a Cochrane Review title | | See *Handbook* Table 4.2.a<br><br>Cochrane Training resource: defining the review question |
| R2 | *Authors* | ***Mandatory*** | |
| | List names and affiliations of all authors | | See *Handbook* 4.2.2<br><br>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 |
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| R3 | *Writing the Abstract* | ***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 | *Abstract, Background* | ***Mandatory*** | |
| | Summarize the rationale and context of the review. | | See *Handbook* 11.8 |
| R5 | *Abstract, Objectives* | ***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 *Handbook* 11.8 |
| R6 | *Abstract, Search Methods* | ***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.<br><br>The Abstract must include the month and year of the set of searches up to which the conclusions of the review are valid. | |

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| | | 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).<br><br>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.<br><br>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.<br><br>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". | |
| R7 | *Abstract, Selection criteria* | ***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 | *Abstract, Data collection and analysis* | ***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." | 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.<br><br>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.<br><br>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. | |
| R9 | *Abstract, Main results: number of studies and participants* | ***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 *analysed* should generally be presented in preference to numbers *recruited* (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 | *Abstract, Main results: study characteristics* | ***Highly desirable*** | |
| | Provide a brief description of key characteristics that will determine the | Summarizing the study characteristics will provide readers of the Abstract with important information about the applicability of the | |

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| | applicability of the body of evidence (e.g. age, severity of condition, setting, study duration). | 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 | *Abstract, Main results: bias assessment* | ***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 | *Abstract, Main results: findings* | ***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.<br><br>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, *then a comment should be made to that effect.* | Incorporating GRADE in Cochrane Reviews. |
| R13 | *Abstract, Main results: adverse effects* | ***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 | *Abstract, Main results: format of numerical results* | ***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 | *Abstract, Main results: interpretability of findings* | ***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 | *Abstract, Authors' conclusions* | ***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. | See *Handbook* 12.7.4 |

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| | | Recommendations for practice should be avoided. | See *Handbook* 11.8 |
| R17 | *Completeness of main review text* | ***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<br><br>Cochrane Training resource: Common errors - inconsistency & inaccuracy |
| R18 | *Consistency of summary versions of the review* | *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 | *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. | 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 | *Background headings* | ***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 *Handbook* 4.5 |
| R21 | *Background references* | ***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 | *Main objective* | ***Mandatory*** | |
| | State the main objective, where appropriate in a single concise sentence. | 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 | |

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| | | 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.<br><br>MECIR conduct standard 2*:* Define in advance the objectives of the review, including participants, interventions, comparators and outcomes.<br><br>Where possible, the format should be of the form "To assess the effects of *[intervention or comparison]* for *[health problem]* for/in *[types of people, disease or problem and setting if specified]*". | |
| 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.<br><br>*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*** | |
| | *If health economics evidence is being reviewed*, state this explicitly in the Objectives (as a secondary objective). | 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<br><br>CIL: module 9 - introduction to health economics |
| R25 | *Qualitative research evidence* | ***Mandatory*** | |
| | *If qualitative research evidence is being reviewed*, state this explicitly in the Objectives (as a secondary objective). | 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 |
|---|---|---|---|
| R27 | *Eligibility criteria for types of study: study designs* | ***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.<br><br>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.<br><br>*MECIR conduct standard 11:* Justify the choice of eligible study designs. | |
| R28 | *Eligibility criteria for types of study: study reports* | ***Mandatory*** | |
| | *If studies are excluded on the basis of publication status or language of publication*, explain and justify this. | Studies should be included irrespective of their publication status and language of publication, unless explicitly justified.<br><br>*MECIR conduct standard 12:* Include studies irrespective of their publication status, unless exclusion is explicitly justified. | |
| R29 | *Eligibility criteria for types of participants* | ***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).<br><br>MECIR conduct standard 5*:* Define in advance the eligibility criteria for participants in the studies.<br><br>*MECIR conduct standard 6:* Define in advance how studies that include only a subset of relevant participants will be addressed. | |
| R30 | *Eligibility criteria for types of interventions* | ***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 | *Role of outcomes* | ***Mandatory*** | |
| | *If measurement of particular outcomes is used as an eligibility criterion*, state and justify this. | 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 | |

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| | | legitimately exclude studies that do not measure smoking rates.<br><br>*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 | *Outcomes of interest* | ***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.<br><br>*MECIR conduct standard 14:* Define in advance which outcomes are primary outcomes and which are secondary outcomes.<br><br>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 | *Search sources* | ***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. | *MECIR conduct standard 36:* Document the search process in enough detail to ensure that it can be reported correctly in the review.<br><br>Also *MECIR conduct standards 24–31* | |
| R34 | *Latest searches* | ***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. | 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).<br><br>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.<br><br>If a ‘catch-up’ search was run subsequent to the review being | |

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| | | written up, any relevant studies not yet assessed for inclusion should be listed in the section 'Studies awaiting assessment'.<br><br>*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.<br><br>*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. | |
| R35 | *Search restrictions* | ***Mandatory*** | |
| | Specify and justify any restrictions placed on the time period covered by the search. | *MECIR conduct standard 35:* Justify the use of any restrictions in the search strategy on publication date or publication format. | |
| R36 | *Searches for different types of evidence* | ***Mandatory*** | |
| | *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. | 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*.<br><br>MECIR conduct standard 26*: 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. | |
| R37 | *Search strategies for bibliographic databases* | ***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.<br><br>*MECIR conduct standard 36:* Document the search process in enough detail to ensure that it can be reported correctly in the review.<br><br>Also MECIR conduct standards 32–35. | |
| R38 | *Search strategies for other sources* | ***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.<br><br>*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 | *Inclusion decisions* | ***Mandatory*** | |
| | State how inclusion decisions were made (i.e. from search results to included studies), clarifying how many | 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 | Cochrane Training resource: selecting studies |

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| | people were involved and whether they worked independently. | process for resolving disagreements. | CIL: module 4 - selecting studies and collecting data |
| R40 | *Data collection process* | ***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.<br><br>*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<br><br>CIL: module 4 - selecting studies and collecting data |
| R41 | *Requests for data* | ***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<br><br>CIL: module 4 - selecting studies and collecting data |
| R42 | *Data items* | ***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<br><br>CIL: module 4 - selecting studies and collecting data |
| R43 | *Transformations of data* | ***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 2×2 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<br><br>CIL: module 4 - selecting studies and collecting data |
| R44 | *Missing outcome data* | ***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<br><br>CIL: module 4 - selecting studies and collecting data |
| R45 | *Tools to assess risk of bias in individual studies* | ***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 *Handbook* guidance for undertaking 'Risk of bias' assessments was followed in its entirety, then a reference to the *Handbook* is sufficient to provide the criteria used to assign judgements (see *Handbook* Sections 8.9 to 8.15). Justify any deviations from the tool.<br><br>*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 *Handbook* (version 5 or later). | Cochrane Training resources: assessing RoB included studies and RoB 2.0 webinar<br><br>CIL: module 5 - introduction to study quality and risk of bias |

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| | | MECIR conduct standards 53 – 61 | |
| R46 | *Effect measures* | ***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<br><br>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<br><br>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<br><br>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.<br><br>*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.<br><br>MECIR conduct standard 63*:* Assess the presence and extent of between-study variation when undertaking a meta-analysis. | Cochrane Training resource: exploring heterogeneity<br><br>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<br><br>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.<br><br>*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<br><br>CIL: module 6 - analysing the data |
| R52 | *Subgroup analyses* | ***Mandatory*** | |

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| | 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.<br><br>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<br><br>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 the synthesis. | *MECIR conduct standard 59*: Address risk of bias in the synthesis (whether quantitative or non-quantitative). For example, present analyses that are stratified according to summary risk of bias, or restricted to studies at low risk of bias. | Cochrane Training resources: assessing RoB included studies and RoB 2.0 webinar<br><br>CIL: module 6 - analysing the data |
| R54 | *Sensitivity analysis* | ***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<br><br>CIL: module 6 - analysing the data |
| R55 | *Summary of findings* | ***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:<br><br>• include results for one population group (with few exceptions);<br>• indicate the intervention and the comparison intervention;<br>• include seven or fewer patient-important outcomes;<br>• describe the outcomes (e.g. scale, scores, follow-up);<br>• indicate the number of participants and studies for each outcome;<br>• 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);<br>• summarize the intervention effect (if appropriate); and<br>• include a measure of the quality of the body of evidence)<br><br>*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.<br><br>Incorporating GRADE in Cochrane Reviews.<br><br>CIL: module 7 - interpreting the findings<br><br>CIL: module 8 - reporting the review |