

PRISMA Checklist

eTable 12 PRISMA Checklist

| Section/topic | # | Checklist item | Reported on page # |
|---------------------------|---|---|--|
| TITLE | | | |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | Main manuscript: page 1 Supplementary material 1 & 2: Page 1 |
| ABSTRACT | | | |
| Structured summary | 2 | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | Main manuscript: page 2 |
| INTRODUCTION | | | |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | Main manuscript: page 3-4 |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | Main manuscript: page 4 Supplementary material 1: Page 1 |
| METHODS | | | |
| Protocol and registration | 5 | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | Available with authors: CRD42019160817 |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | Main manuscript: pages 5 Supplementary material: Page 1 |

| | | | |
|------------------------------------|----|--|---|
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | Main manuscript: page 5 Supplementary material 1: Page 1-2 |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | Supplementary material 1: Pages 3-17 |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | Main manuscript: Pages 5 Supplementary material 1: 1,17 |
| Data collection process | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | Main manuscript: Page 6 Supplementary material 1: Page 17 |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | Supplementary material 1: Page 17 |
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | Main manuscript: Page 6 Supplementary material 1: page 17-18; eTable 14 |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | Main manuscript: Page 6-7 |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis. | Main manuscript: Page 6-7 Supplementary material 2: Pages 1-2 |

| Section/topic | # | Checklist item | Reported on page # |
|-------------------------------|----|--|---|
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | Main manuscript: Page 6 Supplementary material 1: page 17-18, eTable 14 |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | Main manuscript: Page 6-7 Supplementary material 2: Pages 1-2 |
| RESULTS | | | |
| Study selection | 17 | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | Main manuscript: Page 8 Supplementary material: Pages 17, 62 |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | Main manuscript: Pages 19-27 Supplementary material 1: Pages 19-61 |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | Supplementary material 1: eTable 14 |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. | Main manuscript: Pages 19-27 Supplementary material 1: Pages 43-61 |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | Main manuscript: Pages 8-11 |

| | | | |
|-----------------------------|----|--|---|
| | | | Supplementary material 2: Page 3-64 |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | Supplementary material: eTable 14 |
| Additional analysis | 23 | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). | Main manuscript: Page 9-11 Supplementary material 1: Page 3-64 |
| DISCUSSION | | | |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). | Main manuscript: Page 11 |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | Main manuscript: Page 11-12 |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | Main manuscript: Page 13-14 |
| FUNDING | | | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | Main manuscript: Pages 14 |

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

eTable 13 GATHER checklist

| Item # | Checklist item | Reported on page # |
|---|---|---|
| Objectives and funding | | |
| 1 | Define the indicator(s), populations (including age, sex, and geographic entities), and time period(s) for which estimates were made. | Main manuscript: Pages 6-7 (Methods), Table 41 Supplementary material 2: Pages 1-2 |
| 2 | List the funding sources for the work. | Main manuscript: Pages 7 and 14. |
| Data Inputs | | |
| <i>For all data inputs from multiple sources that are synthesized as part of the study:</i> | | |
| 3 | Describe how the data were identified and how the data were accessed. | Main manuscript: Pages 5 and 6. Supplementary material 1: Pages 1 and 2. |
| 4 | Specify the inclusion and exclusion criteria. Identify all ad-hoc exclusions. | Main manuscript: Pages 5. Supplementary material 1: Pages 1 and 2. |
| 5 | Provide information on all included data sources and their main characteristics. For each data source used, report reference information or contact name/institution, population represented, data collection method, year(s) of data collection, sex and age range, diagnostic criteria or measurement method, and sample size, as relevant. | Main manuscript Tables 24 and 23 . Supplementary material 1: eTables 1-5. |
| 6 | Identify and describe any categories of input data that have potentially important biases (e.g., based on characteristics listed in item 5). | Supplementary Material 1: eTables 1, 2 and 14 |
| <i>For data inputs that contribute to the analysis but were not synthesized as part of the study:</i> | | |
| 7 | Describe and give sources for any other data inputs. | NA |
| <i>For all data inputs:</i> | | |
| 8 | Provide all data inputs in a file format from which data can be efficiently extracted (e.g., a spreadsheet rather than a PDF), including all relevant meta-data listed in item 5. For any data inputs that cannot be shared because of ethical or legal reasons, such as third-party ownership, provide a contact name or the name of the institution that retains the right to the data. | Please contact: Dr Rosa Parisi (rosa.parisi@manchester.ac.uk); Dr Ireny YK Iskandar (ireny.iskandar@manchester.ac.uk) |

| Data analysis | | |
|-------------------------------|---|---|
| 9 | Provide a conceptual overview of the data analysis method. A diagram may be helpful. | Main manuscript: Pages 6-7. |
| 10 | Provide a detailed description of all steps of the analysis, including mathematical formulae. This description should cover, as relevant, data cleaning, data pre-processing, data adjustments and weighting of data sources, and mathematical or statistical model(s). | Main manuscript: Pages 6-7. Supplementary Material 2: Pages 1-2 |
| 11 | Describe how candidate models were evaluated and how the final model(s) were selected. | Main manuscript: Page 6-7 |
| 12 | Provide the results of an evaluation of model performance, if done, as well as the results of any relevant sensitivity analysis. | Main manuscript: Page 7 Supplementary material 2: Page 65 |
| 13 | Describe methods for calculating uncertainty of the estimates. State which sources of uncertainty were, and were not, accounted for in the uncertainty analysis. | Main manuscript: Page 7 Supplementary material 2: Page 2 |
| 14 | State how analytic or statistical source code used to generate estimates can be accessed. | Code is available by contacting Dr Rosa Parisi (rosa.parisi@manchester.ac.uk) |
| Results and Discussion | | |
| 15 | Provide published estimates in a file format from which data can be efficiently extracted. | Supplementary material 1: For eTables 1-5 (or contact Dr Ireny YK Iskandar (ireny.iskandar@manchester.ac.uk)). Supplementary material 2: For eTables 6-11 contact Dr Rosa Parisi (rosa.parisi@manchester.ac.uk) |
| 16 | Report a quantitative measure of the uncertainty of the estimates (e.g. uncertainty intervals). | Supplementary material 2: eTables 6-11 contact Dr Rosa Parisi (rosa.parisi@manchester.ac.uk) |

| | | |
|-----------|--|---|
| 17 | Interpret results in light of existing evidence. If updating a previous set of estimates, describe the reasons for changes in estimates. | Main manuscript: Discussion pages 13 |
| 18 | Discuss limitations of the estimates. Include a discussion of any modelling assumptions or data limitations that affect interpretation of the estimates. | Main manuscript Discussion pages 11-12 |