Table 3. Changes between the PRISMA 2009 and PRISMA 2020 checklists

Section and Topic in PRISMA 2020	Topic in PRISMA 2009	Changes introduced in PRISMA 2020
TITLE		
1. Title	Yes	We simplified the item by advising authors to identify the report as a systematic review, which we consider more important than knowing whether meta-analysis was done or not.
ABSTRACT		
2. Abstract	Yes	We modified the item by referring authors to a separate PRISMA 2020 for Abstracts checklist, rather than listing all elements for reporting within a single item, to facilitate clarity about what to report.
INTRODUCTION		
3. Rationale	Yes	We made a minor wording change to the item, asking authors to specify the rationale for the review in the "context of existing knowledge", rather than in the "…context of what is already known", using fewer words to convey the same concept.
4. Objectives	Yes	We modified the item by removing reference to "participants, interventions, comparisons, outcomes, and study design (PICOS)", to ensure the item was applicable to reviews using PICO or an alternative framework to formulate review objectives or questions.
METHODS		
5. Eligibility criteria	Yes	We revised the item to "Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses". Specifying both elements allows readers to understand the scope of the review as a whole and of the particular syntheses within. In addition, providing details of the eligibility criteria for the review, and the groups, allows readers to verify inclusion decisions, and so is important for replication.
6. Information sources	Yes	We expanded the item by listing "databases, registers, websites, organisations, reference lists and other sources", rather than listing only two examples of information sources, to encourage reporting of all sources that were searched or consulted.
7. Search strategy	Yes	We modified the item by recommending authors report the full search strategies for *all* databases, registers and websites, rather than at least one, given that more options are available for doing so than there were in 2009 (e.g. public repositories), and doing so facilitates replication of the search.

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8. Selection process	Yes	We modified the item by deleting text on how to report the results of the selection process, because such guidance belongs in the Results section of the checklist. The item now explicitly recommends authors report how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process, which we considered the minimum elements to report about the selection process.
9. Data collection process	Yes	We modified the item by recommending authors report how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process, which we considered the minimum elements to report about the data collection process.
10. Data items	Yes	We split the item into two sub-items. Item 10a recommends authors list and define outcomes for which data were sought and specify whether all available study results (i.e. for all measures, time points and analyses), or a pre-defined subset of results, were sought. Reporting the latter can help users understand which study results were of interest and whether results were selected in a biased manner. Item 10b recommends authors list and define all other variables for which data were sought, such as participant characteristics and funding source, and is similar to the original PRISMA 2009 item.
11. Study risk of bias assessment	Yes	We modified the item by recommending authors report the risk of bias tool used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process, which we considered the minimum elements to report about the assessment process. We also moved text about methods for incorporating risk of bias assessments in meta-analyses to a more relevant section of the checklist (items #13e and 13f, which address investigations of heterogeneity and sensitivity analyses, respectively).
12. Effect measures	Yes	We renamed the item from “Summary measures” to enhance clarity and changed the wording to clarify that we want authors to report for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results, not the effect measures used by study authors.
13. Synthesis methods	Yes	We split the item into six sub-items to facilitate clarity, with each focusing on unique steps of the synthesis process. The sub-items recommend authors describe: (13a) the processes used to decide which studies were eligible for each synthesis; (13b) any methods required to prepare the data for synthesis, such as handling of missing summary statistics; (13c) any methods used to tabulate or visually display results of individual studies and syntheses; (13d) any methods used to synthesize results; (13e) any methods used to explore possible causes of

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		heterogeneity among study results; and (13f) any sensitivity analyses used to assess robustness of the synthesized results. The explanation and elaboration for these items covers methods for meta-analysis and its extensions, as well as methods to synthesise results when data were not amendable for meta-analysis. Sub-items 13e and 13f replace what was originally item "16. Additional analyses" in the PRISMA 2009 statement.
14. Reporting bias assessment	Yes	We renamed the item from "risk of bias across studies" to "risk of bias due to missing results in a synthesis", because the former might be interpreted by some users as a recommendation to report risk of bias across studies included in the review, such as the number of studies at high risk of bias due to lack of blinding. The item is intended to address that bias that arises in syntheses due to selective non-publication or non-reporting of results.
15. Certainty assessment	No	We added this new item requesting authors describe any methods used to assess the certainty (or confidence) in the body of evidence for an outcome. This review process was mentioned briefly in the explanation and elaboration for item "24. Summary of evidence" in the PRISMA 2009 statement. We recognised that in the years since, assessments of certainty have increasingly been conducted and accepted by various stakeholders as a valuable component of systematic reviews. We considered it prudent to provide guidance in PRISMA 2020 on how to report such assessments.
RESULTS		
16. Study selection	Yes	We split the item into two sub-items. Item 16a is largely similar to the original item in PRISMA 2009, although we modified the wording to remove the recommendation to provide reasons for exclusion at each stage of screening, as we considered this expectation for the title/abstract screening stage to be overly burdensome. Item 16b asks authors to provide citations of studies that met many but not all inclusion criteria ('near-misses') and explain why they were excluded, which we think will be useful to readers wondering why particular studies they expected to see included in the review were not.
17. Study characteristics	Yes	We modified the item by removing the examples of characteristics reviewers might present, as these were non-exhaustive and applicable to reviews of interventions only.
18. Risk of bias in studies	Yes	We modified the item by deleting text about outcome level assessments of risk of bias, which is non-exhaustive given that risk of bias tools can be directed at a whole study, a particular outcome, or a particular result for an outcome.

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19. Results of individual studies	Yes	We modified the item by recommending authors report summary statistics for each group, *where appropriate*, given that for some studies, such as those presenting effect estimates adjusted for covariates, reporting of unadjusted summary statistics could be misleading to readers.
20. Results of syntheses	Yes	We split the item into four sub-items to facilitate clarity. The sub-items recommend authors: (20a) summarise, for each synthesis, the characteristics and risk of bias among contributing studies; (20b) present results of all statistical syntheses conducted; (20c) present results of any investigations of possible causes of heterogeneity among study results; and (20d) present results of any sensitivity analyses. We added item 20a to PRISMA 2020 because summarising the characteristics and risk of bias among studies contributing to each synthesis can help readers understand the applicability and risk of bias in the synthesised result, thus facilitating interpretations by stakeholders. Sub-items 20c and 20d replace what was originally item "23. Additional analysis" in the PRISMA 2009 statement.
21. Risk of reporting biases in syntheses	Yes	We renamed this item from "Risk of bias across studies", for reasons specified above, and used similar wording as that used for the corresponding item in the Methods section of the checklist (see item 14).
22. Certainty of evidence	No	We added this new item asking authors to present assessments of the certainty (or confidence) in the body of evidence for an outcome that were conducted, to match the corresponding item in the Methods section of the checklist (see item 15).
DISCUSSION		
23. Discussion	Yes	We converted the three Discussion section items in the PRISMA 2009 statement (items 24-26) to four sub-items and rearranged the content for better flow. The sub-items recommend authors: (23a) provide a general interpretation of the results in the context of other evidence; (23b) discuss any limitations of the evidence included in the review; (23c) discuss any limitations of the review processes used; and (23d) discuss implications of the results for practice, policy, and future research.
OTHER INFORMATION		
24. Registration and protocol	Yes	We moved this item from its location under the Methods section in PRISMA 2009 into this new section titled "Other information". This relocation is consistent with what is done in other reporting guidelines (e.g. CONSORT,

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		STARD). To facilitate clarity, we split the original item into three sub-items, recommending authors report: (24a) registration information for the review; (24b) where the review protocol can be accessed; and (24c) any amendments to information provided at registration or in the protocol. We also modified the wording to imply that registering a review and making the review protocol accessible are expected, given the benefits of doing so in terms of minimising bias and the existence of multiple repositories to enable these processes.
25. Support	Yes	We renamed this item from "Funding" and expanded the item by asking authors to report sources of financial *and non-financial* support for the review, and the role of funders *and sponsors* in the review. This was done to encourage authors to inform readers whether different supporting bodies may have influenced the design, conduct or findings of the review.
26. Competing interests	No	We added this new item asking review authors to declare any competing interests, given empirical evidence suggesting that, just like individual studies, the conclusions of systematic reviews may be influenced by competing interests of review authors.
27. Availability of data, code and other materials	No	We added this new item asking authors to report whether data, analytic code and other materials used in the review are publicly available, and if so, where they can be found, given that the sharing of such information enables others to reuse the data, check the data for errors, attempt to reproduce the findings, and understand more about the analysis than may be provided by descriptions of methods.