

Reporting Systematic Reviews: PRISMA 2020

Transitioning from PRISMA 2009 to PRISMA 2020

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The [Preferred Reporting Items for Systematic Reviews and Meta-Analyses \(PRISMA\) Statement](#) is an evidence-based reporting guideline for systematic reviews. The original PRISMA statement, published in 2009, presented 27 checklist items under the following sections: title; abstract; introduction; methods; results; discussion; and funding. The corresponding [Explanation and Elaboration \(E&E\) document by Liberati et al.](#) offered descriptions, rationales, and examples of each checklist item. At first glance, some checklist items such as Title (Item 1) may appear unnecessary or self-evident to researchers. However, the E&E document provided guidance on how to report the title to communicate research/document type and improve the discoverability of systematic reviews.

PRISMA 2009 highlighted the importance of the PICOS (Participants, Intervention, Comparisons, Outcomes) framework in the [systematic review process](#). For example, it encouraged authors to incorporate the PICOS components in the objective statement (Item 4), eligibility criteria (Item 6), and list of data items (Item 11). PRISMA 2009 emphasized the assessment of risk of bias (Items 12, 15, 19, 22) preferable with a validated [risk of bias tool](#). Item 24 addressed assessing the quality of evidence, or "summary of evidence," for each outcome in the discussion section of the report. PRISMA 2009 also featured an item (Item 5) for protocol registration. This was an important addition since developing and registering a protocol promoted transparency, reduced bias, and helped teams identify areas of potential challenge in the process.

The 2009 guidelines encouraged authors to employ the PRISMA flow diagram (Items 9, 17) to report the flow of records found during the database searches and selection phases.

Changes in methodology and an increase in systematic reviews addressing non-interventional questions led to researchers and stakeholders [updating the PRISMA Statement](#) in 2020. Although PRISMA 2020 kept many key elements, there are noticeable differences between the two versions. Like the 2009 document, [PRISMA 2020](#) has 27 checklist items, however, there are now more subitems to report. Other key changes include the following:

- There is a new "Other" section, which now includes the protocol and protocol registration information (Items 24a-24c). This section introduces Item 26, "Competing interest" and Item 27 "Availability of data, code and other materials."
- Subitem 10a and 10b added to "Data items", promotes additional analysis of data items and the data extraction process.
- "Synthesis of Results" expanded from a single item in 2009 to six subitems in 2020 (Items 13a-13f)
- "Study Selection" (Items 16a-16b) in the Methods section places new emphasis on describing the selection processes and tools in more detail.

The PRISMA 2020 Statement introduced [four versions](#) of the updated PRISMA flow diagram. The updated flow diagrams offer space for authors to report each searched information source. The new diagrams also present opportunity to document evidence from sources such as websites.

Many journals have established PRISMA 2020 as the standard by which submitting authors should report systematic reviews. The E&E document will help teams that are working on existing reviews to make necessary adjustments. Teams starting a review should familiarize themselves with the PRISMA 2020 recommendations at the start of the process. This will help with [developing the protocol](#) and completing a review that makes it to publication.

Take [Galter's Conducting a Systematic Review: Part 1 - Planning the Process](#) or [Conducting a Systematic Review: Part 2 - Tools & Resources](#) to learn more about the process. Your [liaison librarian](#) will also be happy to discuss your review and the [Systematic Review service](#) at Galter.

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