

Updating the PRISMA reporting guideline for network meta-analyses (PRISMA-NMA): study protocol for a scoping review

Rationale

The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) Statement first published in 2009 was developed to promote transparency and reproducibility in systematic reviews (SRs) and was extended to guide reporting of SRs with network meta-analysis (NMA) in 2015.

While the PRISMA statement was updated in 2020 to reflect advances in the conduct and reporting of SRs, these advances have yet to be incorporated into the PRISMA extension for NMA, and thus necessitates the update of the PRISMA-NMA reporting guideline.

Implications

Results from this scoping review will guide the development of an up-to-date PRISMA-NMA reporting guideline, which will increase methodological transparency, promote reporting consistency with current best evidence, and improve the uptake of research findings in SRs with NMA.

This research will be of interest to knowledge users, including authors, journal editors, peer-reviewers, clinicians, healthcare agencies, patients and public partners.

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Background

- The use of NMA has been widely increasing due to its usefulness in assessing the comparative effectiveness of multiple interventions. In response to advancements in NMA methodology, an up-to-date PRISMA-NMA is required to reflect current methodological evidence.

Objective

- To develop a list of items for potential inclusion in the PRISMA-NMA.

Methodology

- Following the guidelines for scoping reviews by the JBI, we will update the 2014 review to identify additional, more recent studies pertaining to evaluations of reporting completeness and methodological quality of NMA.
- **Eligibility Criteria:**
 - Concept:** Studies on guidance or evaluation of reporting completeness in NMA, assessment of methodological quality in NMA, and guidelines or tutorials describing items related to reporting completeness of NMA will be considered.
 - Context:** Studies related to human health and/or philosophy.
 - Types of Sources:** All study designs will be considered, with no restrictions on the publication year or language. Commentaries, manuscript formatting publications, and journal author guidelines will not be included.
- **Literature Search:** We will search online databases including MEDLINE, EMBASE, CINAHL, and The Cochrane Library, as well as grey literature databases, reference lists of included studies, and key articles identified by the steering committee.
- **Study Selection/Data Abstraction:** After a pilot test, two independent reviewers will perform study selection and data extraction. Discrepancies will be resolved through discussion or consultation with a third reviewer.
- **Synthesis:** Study results will be grouped into broader concepts based on PRISMA 2020, i.e., title, abstract, introduction, methods, results, discussion, and other information. Extracted items will be discussed and refined, where needed, to create a consensus set from included articles.

Knowledge Translation Strategy

The list of items identified from the scoping review will be evaluated by the steering committee to ensure its relevance to NMA. Subsequently, an international, multidisciplinary group comprising NMA experts and end-users will engage in a Delphi survey to refine the guideline items into a final list. Results will be spread widely through various methods, such as publications, conference presentations, webinars, videos, tip sheets, and social media campaigns.

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