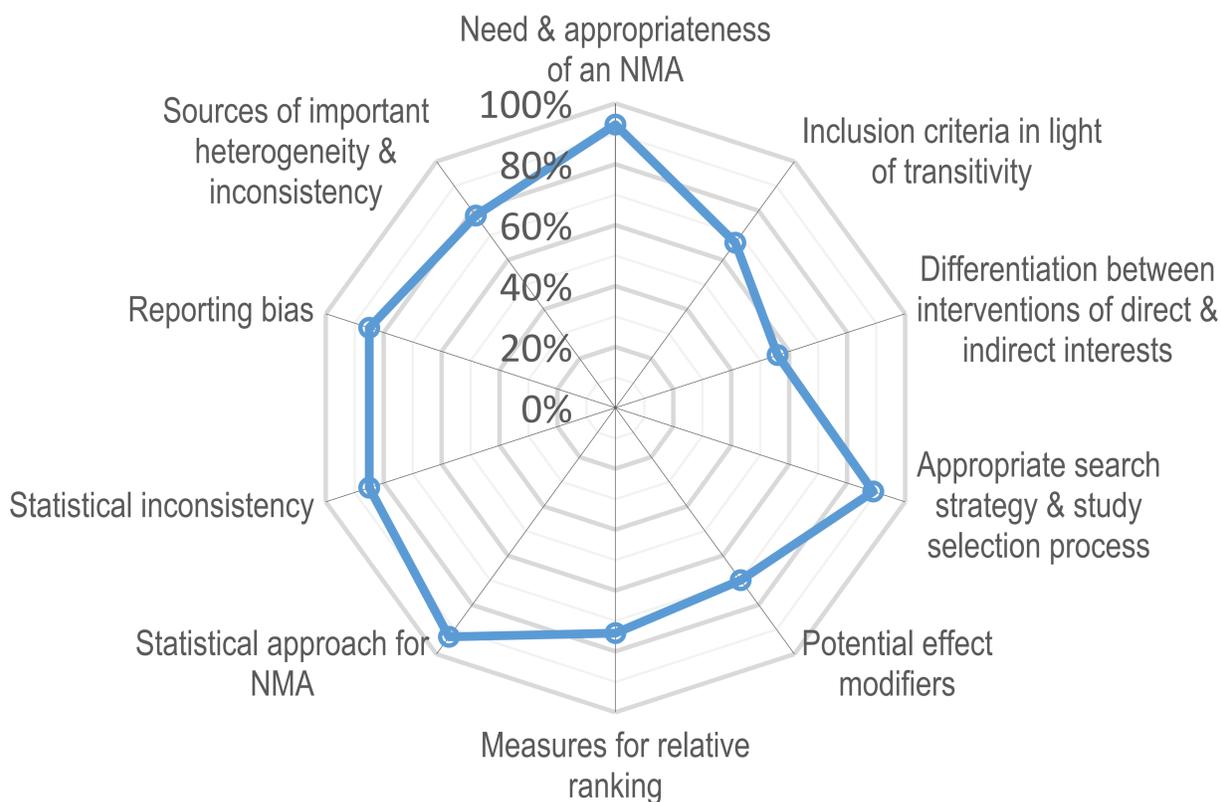


Reporting of Cochrane systematic review protocols with network meta-analyses – a scoping review

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Reporting of Cochrane systematic review protocols with network meta-analysis needs to be improved, especially regarding transitivity assumptions.

Assessments of Cochrane NMA protocols published in 2018

Background

- Network meta-analyses (NMAs) have increased in popularity as they compare multiple treatments for the same clinical condition
- Publishing systematic review protocols is a fundamental part of Cochrane systematic reviews to ensure transparency and reproducibility
- As current RevMan software does not support NMAs, the reporting of NMAs as well as their protocols lack standardization, although guidance on preparing systematic review protocols with NMAs has been proposed recently⁽¹⁾

Objective

- To evaluate how Cochrane systematic review protocols with NMA are reported

Methods

- Systematic search for protocols of systematic reviews with NMA published in 2018 in the Cochrane library
- Assessing the characteristics and reporting of methodologies relevant to NMA in the protocols
- Reporting frequencies for each characteristic and reporting item⁽¹⁾

Patient or healthcare consumer involvement

- Patients and healthcare consumers will be invited to comment on this research project, help with dissemination of the results and increase its accessibility from consumers' perspective

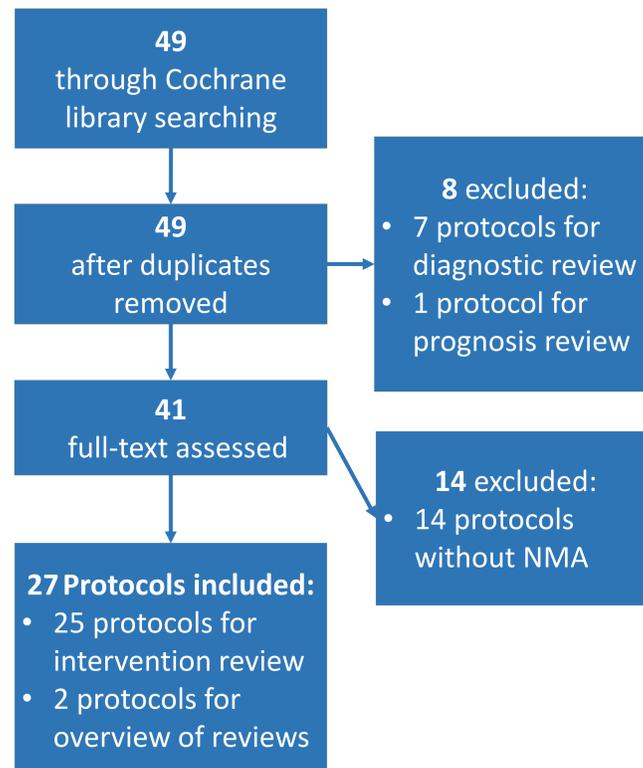


Figure: Study flow diagram

Results

- 27 protocols with NMA from 16 different Cochrane groups published in 2018:
 - 93% protocols for intervention reviews
 - 7% protocols for overviews of reviews
- 63% including at least one author based in Europe
- 74% used NMA in the title

- 93% explained the need of an NMA
- 67% reported the considerations of transitivity assumption in the inclusion criteria
- 56% differentiated interventions of direct interest for practice and interventions that provide indirect evidence
- 15% presented a conceptual network plot to illustrate the "nodes" of interest
- 89% used appropriate search strategy & study selection process
- 70% reported prespecified potential effect modifiers for the evaluation of transitivity
- 74% reported measures for relative ranking
- 93% reported the approaches of NMA
- 70% reported the assumptions on heterogeneity variances
- 85% reported methods to assess statistical inconsistency
- 85% reported methods to assess potential reporting bias
- 78% reported possible sources of important heterogeneity and inconsistency for network meta-analyses

Implication

- To date, Cochrane protocols for NMA do not include all suggested reporting items
- Improved implementation of existing guidance could assist authors, reviewers and editors in preparing and assessing protocols of NMAs and help readers in critically appraising published protocols

Reference

(1) Chaimani A, Caldwell DM, Li T, Higgins JPT, Salanti G. Additional considerations are required when preparing a protocol for a systematic review with multiple interventions. *J Clin Epidemiol.* 2017;83:65-74.

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