

## Conceptual recommendations for selecting the most appropriate knowledge synthesis method to answer research questions related to complex evidence: A scoping review

### Summary

This paper is the fifth in a series of articles that summarize the findings of our scoping review of emerging knowledge synthesis methods.

Here we discuss implications of our findings and provide conceptual recommendations for selecting the most appropriate knowledge synthesis method to answer complex research questions.

### Implications

These findings represent a preliminary understanding on which we will base further advancement of knowledge in this field. Although we have provided conceptual recommendations, we have also highlighted gaps in the literature.

As part of our next steps, we will convene a meeting of international leaders in the field to clarify emerging knowledge synthesis approaches and revise our conceptual model.

**Reference:** Kastner M, Antony J, Soobiah C, et al. Conceptual recommendations for selecting the most appropriate knowledge synthesis method to answer research questions related to complex evidence: A scoping review. *J Clin Epidemiol.* 2016;73:43-9.

**PMID:** [26912124](https://pubmed.ncbi.nlm.nih.gov/26912124/)

For more information, please contact Dr. Monika Kastner:  
[monika.kastner@nygh.on.ca](mailto:monika.kastner@nygh.on.ca)

### What is the current situation?

- The growing complexity of health care issues has highlighted the need to move beyond simply understanding “what works” (through traditional systematic reviews of effectiveness) to consider “why, for whom, and under what contexts” it works (through the use of other types of knowledge synthesis methods).

### What is the objective?

To compare and contrast different knowledge synthesis (KS) methods and map their specific steps in order to gain a better understanding of how to select the most appropriate KS method to answer research questions related to complex evidence.

### How was the review conducted?

- A scoping review of KS methods was conducted using the framework published by Arksey and O'Malley (2005), and the findings published in a series of 6 journal articles and 3 commentaries.
- We searched 10 databases. Two team members independently screened and abstracted each study and thematic analysis was used to map the findings.

### What did the review find?

- 25 unique KS methods were identified from 409 articles.
- The most frequently reported methods were meta-synthesis, meta-ethnography, meta-study, integrative review and realist review.
- 12 methods provided guidance on the complete conduct of the review, while 13 provided guidance on analysis techniques alone.
- The overlap in purpose, output, and applicability of findings to practice and policy of the 12 methods for conducting a complete review were analyzed and mapped to derive a process to select the appropriate KS methods to answer particular research questions.
- A diagram of this conceptual model is available in the appendix of the full publication.