KS methods scoping review - Cochrane abstract submission

Title: What is the most appropriate knowledge synthesis method to conduct a review?A scoping review

Abstract topic category: Methods for conducting high quality systematic reviews - Methods for special topics (e.g. non-statistical, prognostic, observational studies reviews)

Preferred type of presentation: Oral

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Background: Though systematic reviews are often utilized to synthesize complex interventions, additional synthesis methods may be required in order to explore how and why interventions work in different settings.

Objectives: To conduct a scoping review of non-traditional/novel knowledge synthesis methods across multi-disciplinary fields, compare and contrast the different knowledge synthesis methods, and develop an algorithm to match the most appropriate method to a research question.

Methods: Systematic searches of electronic databases (e.g., MEDLINE, Philosopher's Index, PsycInfo) and targeted Internet searches (e.g., Google) were conducted. Reports describing the development/use/comparison of non-traditional/novel methods for synthesizing qualitative or quantitative evidence on complex interventions within health (as per the World Health Organization definition) or philosophy were included. The screening criteria and data abstraction forms were tested *a priori*.

Citations and full-text articles were screened, and data abstraction was conducted independently, by two reviewers. The evidence was synthesized according to the three objectives above.

Results: We screened 17996 titles and abstracts and 1,045 full-text studies reporting on over 30 different knowledge synthesis methods. The five most common methods were: meta-ethnography, meta-synthesis, thematic analysis, realist review, and meta-study. Key methods articles were identified and specific steps were synthesized. Strengths identified across some methods included the ability to 1) combine qualitative and quantitative data, 2) move beyond aggregation to interpretation, 3) contextualize the knowledge synthesis results, and 4) make sense out of conflicting evidence. Based on these results, we developed a preliminary algorithm, which can be used to match a knowledge synthesis question to a specific knowledge synthesis method.

Conclusions: Our results will allow funders, publishers, policy-makers, researchers, teachers, and students to identify the most suitable knowledge synthesis method for their knowledge synthesis questions. Future work will involve consulting with leaders in each of the methods areas to generate agreement on the typology and priorities for research.