Logic model templates for systematic reviews of complex health interventions

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1. Background

Complex interventions are commonly encountered in health service, public health and social welfare and present significant challenges in systematic reviews.

Logic models, originally developed in the field of programme evaluation, can be useful at every stage of the process of a systematic review, from scoping to defining and conducting the review to communicating the results. While various templates of logic models for programme evaluations exist, no such templates have been developed for systematic reviews.

2. Objectives

To develop two different logic model templates for systematic reviews of complex health interventions, focusing either on the underlying systems (systems-based logic model) or the processes involved (process-orientated logic model).

3. Methods

We conducted literature reviews on complex interventions, conceptual frameworks and logic models and the use thereof in systematic reviews, and contacted experts for additional information. We developed logic model templates based on the traditional PICO framework and informed by various templates on logic models for programme evaluations as well as the current use of logic models in systematic reviews.

4. Results

The systems-based logic model template allows authors to focus on the system into which the intervention is introduced, by considering underlying theories, assumptions and contextual factors that play a role in the relationship between the intervention and the outcomes.

The process-orientated logic model template focuses on the components and implementation of the intervention, the different levels of outcomes and the multiple causal pathways and relationships that exist between them.

5. Conclusion

The two logic model templates are useful tools for authors of systematic reviews, because they provide a structured framework that considers critical factors and pathways influencing the effectiveness of the intervention. This template will be tested across multiple systematic reviews of complex interventions and revised as needed.

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