PROTOCOL BRIEF

Sustaining knowledge translation interventions for chronic disease management in older adults: protocol for a systematic review and network meta-analysis

Background and Rationale

Adults over 65 years are at an increased risk of developing chronic disease resulting in functional limitations, a need for ongoing care, and costly hospital admissions. Knowledge translation (KT) interventions to encourage chronic disease management (CDM) are of critical importance in this population, however failure to sustain these interventions negatively impacts patients and health systems, diminishing confidence in future implementation efforts. Our previous scoping review on the sustainability of CDM interventions identified 62 studies that used 13 types of knowledge translation (KT) interventions indicating a need for further study to determine which approaches are most effective at sustaining KT interventions.

Implications

Results from this systematic review and NMA will inform KUs about the sustainability of KT interventions for CDM, namely to provide guidance on a toolkit for developing sustainable KT interventions for CDM in older adults.

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Objectives

- Complete a systematic review and network meta-analysis (NMA) of the effectiveness and cost-effectiveness of sustainability of KT interventions that target CDM in older adults for end-users and policy makers on health care outcomes.

- Use the results of this review to complete an economic analysis of the interventions that were identified as being effective.

Methodology

- Our eligibility criteria are outlined using the PICOS framework, as follows:

  - *Population:* Older adults (≥65 years) with ≥1 chronic conditions (including non-communicable diseases) or their informal caregiver.

  - *Intervention:* KT intervention (evidence-based strategy used to support implementation of the CDM) targeting CDM (evidence-based clinical intervention).

  - *Comparators:* All comparators, including other KT interventions or usual care.

  - *Outcomes:* Sustained implementation of the KT intervention beyond 1 year after implementation or the end of funding. Secondary outcomes will be selected by the team's knowledge users (KUs) based on relevance for their decision-making.

  - *Study designs:* Randomized controlled trials and studies examining cost (e.g., cost-effectiveness, cost utility, cost-benefit).

- **Literature Search:** MEDLINE, EMBASE, Cochrane Central Register of Controlled Trials, CINAHL and Campbell databases will be searched from inception onwards; references of included articles will be scanned; grey literature searches of relevant websites will be conducted and team members will use their linkages with experts to identify additional articles.

- **Study Selection/Data Abstraction:** Independent pairs of reviewers will perform study selection, data abstraction and risk of bias assessment, and discrepancies will be resolved by discussion or involvement of a third reviewer.

- **Synthesis:** If the assumption of transitivity is valid and the evidence forms a connected network, we will conduct a NMA using a Bayesian random-effects model. An economic evaluation will be conducted using a decision analytic model and a probabilistic analysis.

Knowledge Translation Strategy

- Throughout the review process, we will engage with KUs who will lead the dissemination of our results. Evidence-based approaches to dissemination will be tailored to KU needs and a variety of passive (e.g. publication) and active (e.g. knowledge exchange events) dissemination strategies will be used.