Ganann, Rebecca 2020 The EMBOLDEN study: Enhancing physical and community mobility in older adults with health inequities using community co-design. *International Journal of Integrated Care, 21(S1)*:A101, pp. 1-8, DOI: doi.org/10.5334/ijic.ICIC20242

## CONFERENCE ABSTRACT

# The EMBOLDEN study: Enhancing physical and community mobility in older adults with health inequities using community co-design

ICIC20 Virtual Conference – September 2020

Rebecca Ganann[1,]

1: McMaster University, Hamilton, Ontario Canada

***Background***

Physical mobility and social participation are needed to maintain independence and quality of life. Mobility barriers can lead to social isolation, poor physical and mental health, and are recognised precursors to frailty, increased hospitalisations and premature death. This is particularly true for older adults who experience barriers to physical and/or social engagement. To date, most mobility-enhancing interventions in older persons have been designed by researchers without patient/citizen input and applied in controlled settings; their translation to real-world contexts is often impractical and rarely occurs. A model that works to improve physical activity and nutrition in a manner that considers an individual's lifestyle and personal preferences, and builds on existing community health and social services, is necessary for true public health impact. The EMBOLDEN research program aims to make important contributions to improve physical and community mobility of older adults living in neighbourhoods with health inequities through a co-designed community-based intervention.

***Methods***

This 4-year research program will be conducted in Hamilton, Canada with the following phases: (1) Environmental scan, systematic review, and experience-based intervention co-design; (2) Pragmatic randomized controlled trial using a type II hybrid implementation-effectiveness design; and (3) Sustainability and scalability assessment.

***Results***

Phase 1 of the EMBOLDEN research program is underway. The completed environmental scan examined community-based features associated with health inequities, identified priority neighbourhoods based on these features, and explored assets and gaps in available and relevant health and social programs. The systematic review (Oct. 2019 completion date) identified a wide range of group-based community physical activity and multi-component interventions to promote physical and community mobility in older adults; however there were no nutrition-specific interventions and very few addressed health inequities .

DiscussionTogether, the environmental scan and systematic review findings provide a foundation for co-designing an innovative group-based community intervention that targets physical and community mobility, healthy eating, social participation, and system navigation. An experience-based co-design approach using persona-scenario and focus group data collection strategies will be used to explore the experiences of older adults and service providers engaging with community-based health and social services to promote physical mobility and social participation. A Strategic Guiding Council comprised of local intersectoral service providers and older adult citizens will collaboratively partner with researchers to refine the pragmatic trial protocol and determine priority features of the intervention.

***Conclusions***

The EMBOLDEN study's phased approach is designed to improve physical and community mobility of older adults, enhance social participation, and facilitate connections to community programs in neighbourhoods with significant health inequities through a co-designed community-based intervention grounded in behavioural and health promotion strategies reflecting social cognitive theory and best evidence.

***Lessons Learned***

An interdisciplinary team brings diverse perspectives to the research program and continues to build capacity in community-based research.

***Limitations***

Disease-specific programming was an exclusion criteria for the systematic review; this may provide some explanation for the lack of nutrition-specific programming.

***Suggestions For Future Research***

Further investigation into group-based nutrition-specific community programming may provide valuable insight into prioritising the inclusion of nutrition support in multi-component interventions.