The objective of this workshop is to support early investigators in developing and testing complex interventions targeting older populations.

Organized around the Medical Research Council framework for the development and evaluation of complex interventions to improve health, participants will have the opportunity to develop or refine their own intervention ideas over 7 sessions. Expert faculty facilitators review key points using case study examples, highlight resources and provide self-study materials. Ample time for discussion, small group work, and problem-solving around the scholars’ research areas is provided.

Topics and learning objectives are listed on the next page.

REGISTRATION

- Registration is limited
- Participants should commit to attending at least 6 sessions
- Email Cathleen Colon-Emeric (cathleen.colonemic@duke.edu)
- Attach current CV or biosketch (any format)
- Briefly describe the type of intervention you are considering

Duke Pepper Center Mission:

To understand and optimize reserve and resilience
Workshop Topics and Objectives

Introduction to the Intervention Development Framework (Faculty facilitators: Colón-Emeric, Johnson)

- List the 5 phases of complex intervention development and describe why they are necessary
- Identify types of complex research in older adults, and why complex interventions are usually required
- Scholars give brief presentations of their intervention area and stage of development
- Review course goals and logistics

Pre-Clinical or Theoretical Phase (Faculty facilitators: Crowley, Zullig)

- Define and quantify the problem, identify and quantify the population most at risk/likely to benefit
- Understand the pathways by which the problem is caused/sustained
- Describe the existing evidence that your proposed intervention might have the desired effect
- List commonly used models of behavior change, organizational change, multiple risk factor reduction, etc. that are useful in aging research
- Adopt, adapt, or develop a theoretical model for your intervention

Phase I: Defining components of the intervention (Faculty facilitators: Whitson, Steinhauser)

- Describe the organizational/social/environmental context for your proposed intervention
- Use the theoretical model to identify critical leverage points on the pathway and potential interventions to change them
- Use principles of community/participant engaged research to obtain stakeholder input into the intervention components and delivery
- Understand how intervention components may need to be adapted for elderly/vulnerable groups.
- List basic qualitative methods useful for intervention development and refinement

Phase II: Exploratory Trial – Optimize intervention (Faculty facilitators: Schmader, Pieper)

- Describe common pilot study designs
- Measure the feasibility and acceptability of intervention components
- List components of intervention fidelity and how to measure them
- List data you will need for design of an efficacy/effectiveness trial and strategies for obtaining it in the exploratory phase

Phase II: Exploratory Trial – Optimize evaluation (Faculty facilitators: Morey, Reeve)

- List types of outcomes commonly examined in aging research
- Identify resources for validated Patient Reported Outcomes
- Use strategies to minimize participant burden
- Identify issues in adapting outcomes for older populations
- Describe how exploratory trials inform optimization of measurement protocols

Phase III: Pragmatic Trial Design (Faculty facilitators: Colón-Emeric, Pendergast)

- List options for testing a complex intervention and when each is most appropriate: individual randomized trial, group randomized trial, stepped-wedge designs
- Describe principles/pitfalls in estimating sample size requirements for each design type
- Understand human subjects and ethical considerations in pragmatic trials of older adults

Scholar presentations, Course Evaluation and Celebration