Novel Experimental Approaches to Designing Effective Multi-component Interventions

SBM Pre-conference Workshop—April 11, 2018

Presenters: Linda M. Collins, Penn State University
Inbal Nahum-Shani, University of Michigan
Susan Murphy, Harvard University

Moderators: Ashley Walton, Harvard University
Daniel Almirall, University of Michigan
Goal: A Non-technical Introduction to

- Multi-component Interventions
  - fixed interventions,
  - adaptive interventions,
  - just-in-time adaptive interventions

- Multi-phase Optimization Strategy
  - An organizing framework for optimizing multi-component interventions: preparation, optimization, evaluation

- Novel experimental approaches to inform the optimization of multi-component interventions
  - Standard factorial designs
  - Sequential multiple-assignment randomized trials
  - Micro-randomized trials
Agenda

Multi-phase Optimization STrategy
Linda M Collins, Penn State University 9:00-10:15

Small Break 10:15-10:30

Adaptive Interventions and SMART
Inbal Nahum-Shani, University of Michigan 10:30-11:45

Lunch Break 11:45-1:05

Begin Group Practicum 1:05-1:15

Just-in-time Adaptive Interventions and Micro-Randomized Trials (MRT)
Susan Murphy, Harvard University 1:15-2:30

Group Practicum 2:30-3:30

Team Presentations and Feedback 3:30-5:00