ABCT 2011 Workshop Proposal
Association for Behavioral and Cognitive Therapies
2011 Annual Meeting, November 10-13, 2011 (Toronto, Canada)

Workshop Title: Developing Dynamic, Sequential Interventions that Optimize Mental Health Outcomes: Novel Clinical Trial Design and Data Analysis Strategies

Presenter: Susan A. Murphy, PhD, Department of Statistics & Institute for Social Research, University of Michigan
samurphy@umich.edu, Professor, (734) 647-3684

Co-Presenter: Daniel Almirall, PhD, Institute for Social Research, University of Michigan
dalmiral@umich.edu, Faculty Research Fellow, (734) 936-3077

Course Level: Attendee level of familiarity with the material is MINIMAL. This is a course for BEGINNERS.

Categories: Interventions development (primary); Methods (secondary)

Keywords: Adaptive treatment strategies; experimental trial designs; individualized treatments

Abstract (200 words exactly): The effective management of mental health disorders often requires individualized, sequential decision making whereby treatment is dynamically adapted and re-adapted over time based on a patient’s on-going response to treatment. An adaptive treatment strategy (ATS) operationalizes individualized sequential decision making via a sequence of decision rules that specify whether, how, for whom and when to alter the intensity, type, or delivery of pharmacological and/or psychosocial treatment at critical decision points in the management of chronic mental health. ATSs can be used to develop or supplement clinical treatment guidelines, and they inform the evidence-base for treating mental health disorders. In this workshop, we present a novel, experimental design (namely, sequential multiple assignment randomized trials, or SMARTs) intended specifically for the purpose of developing and optimizing adaptive treatment strategies. The workshop will include an introduction to ATSs and SMARTs, a discussion of SMART design principles including the choice of primary and secondary aims, and an introduction to primary and secondary data analysis strategies. Participants will have the opportunity to both verbally pose questions as well as to anonymously submit questions, concerns, or points of confusion. For questions not addressed during the workshop, Drs. Almirall and Murphy will follow-up with participants over email.

Participant Learning Objectives:

- Learn how adaptive treatment strategies (ATSs) operationalize the tactics and strategies of individualizing treatment for mental health disorders. What are ATSs? Why do we need them?

- Learn about sequential multiple assignment randomized trials (or SMARTs) that can be used to inform the development of individually tailored clinical decision rules in mental health research. Learn about SMART study design principles.

- Learn about the types of primary and secondary scientific aims a scientist can specify in the design of, and grant application involving, a SMART.

Recommended Readings:


Presenter Headshots: