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Causal Inference Program Opening Workshop
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SPEAKER TITLES/ABSTRACTS

Michael Rosenblum
Johns Hopkins University

"Adaptive Design in Surveys and Clinical Trials: similarities, differences and opportunities for cross-fertilization"

Adaptive designs involve preplanned rules for modifying an on-going study based on accruing data. We compare the goals and methods of adaptation for trials and surveys, identify similarities and differences, and make recommendations for what types of adaptive approaches from one domain have high potential to be useful in the other. For example, clinical trials could benefit from recently developed survey methods for monitoring which groups have low response rates and intervening to fix this. Clinical trials may also benefit from more formal identification of the target population, and from using paradata (contextual information collected before or during the collection of actual outcomes) to predict participant compliance and retention and then to intervene to improve these. Surveys could benefit from stopping rules based on information monitoring, applying techniques from sequential multiple-assignment randomized trial designs to improve response rates, pre-specifying a formal adaptation protocol and including a data monitoring committee.We conclude with a discussion of the additional information, infrastructure and statistical analysis methods that are needed when conducting adaptive designs, as well as benefits and risks of adaptation.
Joint work with Peter Miller, Benjamin Reist, Elizabeth A. Stuart, Michael Thieme, and Thomas A. Louis. Paper: https://doi.org/10.1111/rssa.12438