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Date: June 14th, 2012
Time: 11:00am – 1:00 pm
Place: 102 S. Henderson

Area of Specialization: Prevention & Methodology

Abstract

Successful demonstrations of evidence-based preventative interventions (EBPIs) have led to a growing interest in prevention’s capacity to reduce major public health problems with greater efficiency. In response—just as prevention scientists once distinguished between the efficacy and effectiveness of prevention programs—now researchers are considering the distinction between program effectiveness and efficiency (i.e., contextualizing impact in terms of cost). This inquiry into the benefits and costs of EBPIs presents an opportunity to demonstrate prevention’s impact as well as its greater value to society.
To accurately evaluate the efficiency of prevention efforts, program cost-effectiveness must be gauged in real-world contexts. In turn, new methodological approaches are needed to account for potential confounders that may reduce researcher’s ability to draw causal inferences about program impact. For instance, selection bias is introduced when local communities adopt one program over another and when the decision to enroll in multiple programs is left up to participants.

This work demonstrates an innovative approach for assessing the efficiency of evidence-based preventive interventions delivered in everyday settings. Using data from the PROSPER dissemination trial (over 12,000 youth; 28 Communities), this project applies propensity and marginal structural models to strengthen causal inference within cost-effectiveness analyses of community prevention efforts. Using these analytic techniques, I evaluated the effectiveness and cost-effectiveness of three school programs (Life Skills Training, All Stars and Project Alert) and a family program (SFP 10-14) to reduce prescription opioid misuse (e.g., Vicodin, OxyContin). Findings indicated that universal school-based EBPIs can on their own reduce prescription opioid misuse in a cost-effective manner and that the efficiency of a prevention effort employing such school programs can be enhanced by deploying an additional family-based program.

This methodological approach provides an opportunity to increase the relevance of prevention impact analyses by allowing researchers to better contextualize program effectiveness in terms of program costs. Specifically, this method provides a more refined approach for understanding the impact of combining interventions and may expedite the development of more efficient prevention efforts. Further, analyses such as these can provide important information to not only researchers, but to multiple stakeholders who seek to translate prevention science into practice.