Welcome to PSMG’s Fall 2020 Virtual Grand Rounds! We are excited to interact with our PSMG community, collaborators and new members. We look forward to thought-provoking and cutting-edge presentations to stimulate engaging dialogue. See you on Tuesdays!

09/15/2020

BOHDAN NOSYK, PHD, MA, BA

Simon Fraser University

Localized economic modeling to support implementation of the "Ending the HIV Epidemic in America" initiative

In 2016 our investigative team began a project aiming to identify optimal combination implementation strategies to reduce the public health burden of HIV/AIDS in six US cities (NIH-DA-041747). These six cities, all subsequently included in the EHE initiative, comprised 12 of 48 EHE-targeted counties and 24.1% of people living with HIV/AIDS in the nation. Considering the impact of 16 evidence-based interventions to Diagnose, Treat and Protect against HIV/AIDS, we found unique combination implementation strategies provided the greatest health benefits in each city; no two cities featured the same mix of interventions in their ‘optimal’ strategy. Moreover, we found the EHE goals were attainable in three of six cities. The biomedical interventions we considered would however have to be delivered at ideal levels of implementation, which would require additional efforts to reduce barriers in access to care and explicitly focus on reducing disparities in healthcare access among Black and Hispanic communities. We argue that promoting health equity is key to bridging this implementation gap and propose an approach to establish an equitable distribution of resources to maximize the impact of the EHE initiative.
WRITER VERMEER, PHD, NANETTE BENBOW, MAS.
Northwestern University

Ending the HIV epidemic in Chicago: Evidence from high-fidelity local agent-based model

Agent-based models have enormous potential for modeling complex social phenomena. The ability to model complex individual-level social dynamics and project system-wide behaviors can help inform decision makers in their effort to curb a phenomenon like the spread of HIV. To produce actionable results, models need to accurately capture the dynamics and behaviors observed by decision makers. As such, models aimed at supporting decision making need to be tailored to the local context by incorporating behaviors based on local data. In this presentation we describe our model for HIV-spread in Chicago and highlight how we used Chicago-level data and input from local public health experts to inform this model. We will illustrate how our model can be used to perform predictive scenario analysis and discuss how these results can be used to inform decision makers as they plan their HIV care and prevention strategies to end the HIV epidemic.

JD SMITH, PHD, DENNIS LI, PHD, MIRIAM RAFFERTY, PT, DPT, PHD
University of Utah School of Medicine
Northwestern University

The Implementation Research Logic Model: A Method for Planning, Executing, Reporting, and Synthesizing Implementation Projects
Abstract forthcoming.
Advancing implementation of eHealth interventions for HIV prevention through the sale up of Keep It Up!

Despite substantial NIH investment in developing eHealth HIV prevention interventions, little implementation research has examined strategies to effectively scale up these programs. The Keep It Up! 3.0 study advances our knowledge by comparing two approaches for delivering an online CDC-best-evidence HIV intervention in 44 counties. This presentation describes our county-randomized hybrid type III effectiveness–implementation trial, focusing on the pragmatic design of our sampling methodology, outcome measures, the intervention application, and recruitment/retention protocols. By emulating real-world contexts, we can understand how to not only have the greatest public health impact with but also speed up implementation of eHealth HIV intervent
THOMAS MACKIE, PHD, MPH, R. CHRISTOPHER SHELDRICK, PHD
Rutgers School of Public Health

Rapid Cycle Systems Modeling and Decision Sampling to Inform Development and Implementation of System-Wide Innovations to Promote Pediatric Mental and Behavioral Health

Calls have been made for greater application of simulation modeling and decision sciences to expedite research evidence use into mental health policy. Funded by W.T. Grant Foundation, Drs. Mackie and Sheldrick will report on a study, entitled Research Evidence Adoption for Child Health (REACH), in which they propose the use of Rapid Cycle Systems Modeling (RCSM), as an implementation strategy that aims to assist local decision-makers in needs assessment and prioritization, knowledge exchange, and consensus building when developing system-wide innovations. RCSM requires that one (1) identify gaps in the information available and questions requiring resolve to inform stakeholders’ decisions, (2) build a simulation model and identify relevant estimates to parameterize the model (e.g., evidence reviews), and (3) conduct group facilitation sessions to assess model utility and need for further adaptation.

PARYA SABERI, PHARMD, MAS, AAHIVP
University of California, San Francisco

A tailored clinic-level intervention using a stepped-wedge design to increase PrEP uptake in primary care settings

Lack of healthcare provider knowledge, capacity, and willingness to prescribe PrEP are barriers to PrEP delivery in clinical settings. In this presentation, we will discuss details of the PrEP Optimization Intervention (PrEP-OI) which combines a PrEP Coordinator with an online panel management tool to assist providers with PrEP uptake, persistence, and management in a large safety-net system. The intervention was rolled out at 14 primary care San Francisco Department of Public Health clinics using a stepped-wedge design preceding a follow-up phase. Additionally, we will review the challenges the study overcame with the development of PrEP-OI’s technology-based component, onboarding and implementation, and response to the SARS-CoV-2 pandemic.
Bridging the Gap for EHE: Implementation Science as an Implementation Strategy

This talk will discuss the role of implementation science in Ending the HIV Epidemic (EHE) goals at both the national and local levels. Not only can implementation science inform EHE investments, its tools, models and frameworks are critical to supporting and enhancing successful EHE programs and strategies. Practice-driven, collaborative implementation science research that focuses on mechanisms, intervention specification, and all four levels of strategies and outcomes will have the greatest impact.

Advancing Research on Sustainability within Implementation Science

This webinar will focus on opportunities within implementation science to advance research on sustainability. Sustainability relates to the continued delivery of program components for the sustained achievement of desirable program goals and health outcomes. While research on the sustainability of evidence-based interventions has been growing rapidly in recent years, it has been identified as one of the most important yet challenging translational research areas we face in implementation science. This webinar will highlight: 1) conceptual, methodological, and measurement issues in studying sustainability; 2) multilevel factors that influence the sustainability of interventions in a range of public health and health care settings; 3) frameworks that are useful for guiding research in this area, including a focus on dynamic sustainability; 4) applied examples from the field; and 5) key areas for future research.