

## **9<sup>th</sup> Annual Conference on the Science of D&I**

### **Areas of Focus**

#### **Behavioral Health**

- Studies that develop transformative research strategies to promote implementation, adoption, accessibility, and sustainability of evidence-based practices in behavioral health
- Studies that optimize the reach of hybrid effectiveness-implementation research designs
- Innovative implementation studies designed to improve behavioral health outcomes among diverse, vulnerable, and underserved populations around the globe
- Studies that improve implementation strategies for behavioral health that ensure engagement of patients, decision-makers, healthcare organizations, and other key stakeholders.
- Studies that advance implementation designs that address the complexities in behavioral health, from multifaceted interventions, to patient comorbidities, and contextual factors.
- Studies to develop and test implementation strategies to improve delivery of guideline-based care in behavioral health.

#### **Big Data and Technology for Dissemination & Implementation Research**

- Use of technology to enhance reach, access and acceptability of interventions
- Innovative approaches to obtaining and implementing data collection (e.g. sensors, mobile and other new ways of collecting PROs, data linkages) to better understand the context for implementation
- Innovative approaches to analyzing data (e.g. machine learning, predictive analytics, network analysis, natural language processing, analysis of intensive longitudinal data) to better design and evaluate an implementation program
- Presentation of data for diverse audiences (e.g. visualizations, new approaches to translation and dissemination) to improve dissemination and assist in implementation
- The use of data to assist decision-making and to tailor delivery programs to meet the needs of the target population (e.g. precision delivery)

#### **Clinical (i.e., Primary, Specialty, Hospital, etc.) Care Settings**

- Frameworks and/or methods to achieve sustainability of dissemination and implementation of evidence-based interventions
- Frameworks and/or methods in de-implementation of ineffective or unproven clinical practices
- Methods that advance our understanding of the requisite balance of fidelity and adaptation in dissemination and implementation
- Rigorous observational studies of practice-led dissemination and implementation processes
- Economic evaluation in dissemination and implementation research in clinical settings
- Implementation science to improve health outcomes in underserved groups across highly variable primary care practice settings

#### **Global Dissemination & Implementation**

- Strengthening understanding of the role of overall context in implementation science in LMICs including the social and health systems.
- Learning from successes (enablers) and failures (disablers) of implementation: Examples of dissemination and implementation research in low- and middle-income countries
- Building capacity for dissemination and implementation research in LMICs (at the individual and institutional levels)

- Understanding scale up and sustainability in dissemination and implementation research: learning from resource constrained settings
- Evaluating the science of improvement/implementation in the context of LMICs – increasing rigor and attribution

### **Health Policy Dissemination and Implementation**

- Scientific study of implementation, sustainment, and/or abandonment of state, local, regional, or national policies fostered by public or private decision-makers, including, but not limited to, major changes in healthcare delivery systems. Of particular interest are efforts to coordinate care, payment models that reward performance rather than volume, and approaches to integrating primary care and population health.
- Evaluations of initiatives to promote the use of evidence in policymaking in various domains of health policies, including cross sector policies (e.g. in juvenile justice, education, etc...)
- Rigorous evaluations of implementation outcomes of policies, including deimplementation, unintended consequences and economic dimensions, such as return on investment.
- Studies testing optimal strategies to implement or enhance uptake, sustainment, and preservation of core components of policies as they are adapted to local conditions. Of particular interest are efforts to implement policies in low-resourced environments and organizations that serve vulnerable populations.
- Methods/designs for evaluating policy implementation and sustainment, e.g., randomized program evaluation, stepped-wedge, in-depth analyses.
- Studying the use of policies to enhance the dissemination, implementation and/or sustainment of evidence-based practices.

### **Models, Measures, and Methods**

- Measures and methods to capture the dynamic evolution of interventions across time and context
- Studies demonstrating the application of simulation and statistical modeling techniques to implementation research questions
- Empirical tests of integrative conceptual models or theories of (de)implementation processes
- Research on dissemination or implementation methods or measurement that attempt to generalize across clinical conditions and settings
- Measures, methods, or models to predict or explain sustainability of implemented practices
- Studies that demonstrate rigorous application of mixed methods approaches (i.e., integration of qualitative and quantitative methods)

### **Precision Medicine**

- Implementation of return of results: incorporating genomic data into routine care
- Use of Big Data at the population level that incorporates multiple phenotype sources (e.g., genomic, behavior, diagnostic) to implement strategies for customizing treatments for subpopulations
- Optimizing patient-provider decision-making regarding involving genomic data
- Methodologic issues in studying precision medicine implementation in light of rapidly changing evidence base

### **Prevention and Public Health**

- New methods for evaluating dissemination or implementation of interventions to prevent disease and improve public health, including research design, measurement, data analysis, or data visualization.
- Approaches to the conduct or dissemination of systematic reviews of implementing prevention interventions in clinical and community settings.

- Studies of the use of evidence in the implementation of local, state, or national policies (including those related to the ACA) to prevent disease and improve public health.
- The role of dissemination and implementation research to better targeting population-level interventions (“precision public health”).
- The role of collaboration among hospitals, health care systems, community organizations, and/or government agencies in implementing disease prevention and public health initiatives.
- Models for disseminating public health best practices or promising public health interventions across jurisdictions
- Studies on replication and scale-up for community-based public and population-based interventions

### **Promoting Health Equity and Eliminating Disparities**

- Culturally-based approaches to dissemination and implementation research
- Community, system or population level implementation to address health disparities (e.g., health care systems, education systems, community-wide environmental interventions, policy changes)
- Studies of models to reduce or eliminate barriers to dissemination and implementation of evidence-based interventions and practices for diverse communities and underserved populations. (including culturally-based approaches; research on engagement, adaptation),
- Sustainability within settings and systems to promote health equity and eliminate disparities
- Building capacity to address health disparities in dissemination and implementation research