19th Annual Conference on the Science of D&I

Areas of Focus

Behavioral Health

- Studies of implementation strategies for novel, evidence-based digital mental health interventions that improve uptake, engagement, and sustainment
- Innovative research approaches and platforms, including data science, geospatial analysis tools, predictive analytics, artificial intelligence, and machine learning, to promote accessibility, adoption, uptake, implementation, sustainability, and scale up of evidence-based practices in behavioral health
- Studies of new, multi-level implementation strategies that ensure engagement of multiple and key partners including care recipients or their caregivers, peer support specialists, communities, decision-makers, providers, payors, and healthcare organizations in implementing or sustaining behavioral health evidence-based practices
- Innovative implementation studies designed to improve behavioral health outcomes of underserved individuals (e.g., individuals experiencing a Serious Mental Illness (SMI), pediatric populations, and rural communities) and in diverse settings (e.g., criminal justice, child welfare, residential treatment)
- Implementation studies focused on integrating behavioral health into primary care and other healthcare settings using novel approaches or multifaceted implementation strategies
- Implementation studies examining outer context and social drivers of health related to implementing interventions to address adolescent mental health, suicide, and substance use disorders (e.g., opioid, alcohol, stimulant, and methamphetamine use)
- Studies exploring implementation strategies to promote measurement-based care in diverse settings like schools, community mental health and primary care

Building the Future of D&I Science: Capacity Building, Infrastructure, and Emerging Research Areas

- Capacity building: Innovative approaches to capacity building with a wide range of partners. We are especially interested in approaches that broaden and strengthen the implementation workforce (e.g., faculty, implementation scientists, practitioners, intermediaries, and other relevant partners) and those that emphasize both foundational and advanced competencies
- Infrastructure building: Programs that highlight efficient, pragmatic, and/or innovative platforms (e.g., practice-based research networks, implementation meta-laboratories, departments, institutes, centers, or cores), data sources (e.g., electronic health records, administrative data, mixed methods data repositories), and analytic techniques (e.g., multilevel mechanistic work) for conducting dissemination and implementation research
- Implementation rigor: Studies that demonstrate rigorous, pragmatic, and generalizable approaches to implementation, de-implementation, and/or sustainability
- Emerging or hot topics: Studies focused on the intersection of new and emerging implementation topics (e.g., AI and implementation science, de-implementation, dissemination science, unintended consequences of implementation).
- Future directions in methods: Studies focused on the intersection of new and emerging methodological areas and implementation (e.g., living meta-analysis, realist reviews, large language models, natural language models, data science, learning health systems) and/or draw deeply from established fields, theories, and methods that are currently underutilized in dissemination and implementation science
- Extensions or alternatives to prevailing approaches: Conceptual and empirical work that constructively critiques and provides extensions or alternatives to prevailing frameworks, methods, research designs, and approaches in dissemination and implementation science

Clinical Care Settings: Patient-Level Interventions

- Studies testing approaches to adapt patient-level clinical interventions and/or implementation strategies over time and across evolving clinical care contexts, such as telehealth, collaborative care, community-based care, hospital @home, and incorporating a range of patient and caregiver perspectives.
- Studies focusing on increasing and/or sustaining patient engagement in the receipt of evidence-based care (e.g., nudges, patient education, patient navigation, symptom screening).
- Optimal implementation strategies for digital health tools and technology, including integration into clinical workflows, sustainment, de-implementation of low-value tools, and alignment with patient and clinician needs (e.g., mHealth smartphone apps, eHealth, patient portals, shared decision-making tools, and data visualization)
- D&I studies on the implementation, evaluation, governance, and/or sustainment of patient or provider-focused machine learning based tools or agent focused intervention in healthcare settings (e.g., generative AI, risk prediction, patient monitoring).
- Innovative approaches to measuring patient-level implementation outcomes, including patient-reported implementation outcomes, use of EHR or digital data, and pragmatic, low-burden measurement strategies.
- Integration of patient, provider, healthcare system, and/or community stakeholders' perspective into research design, intervention development, evaluation, or selection and tailoring of clinically focused implementation strategies.
- Innovative co-design methods incorporating patients, consumers, and other community-based stakeholders throughout the intervention adaptation process.

Clinical Care Settings: System-Level Interventions

- Understanding how multi-level factors (e.g., facilitators and barriers) within the healthcare delivery system affect adoption, implementation or de-implementation, sustainment, or sustainability of interventions; and studies that identify key difference makers to implementation regardless of context or identify system-level strategies to facilitate implementation in different contexts
- Studies that address organizational infrastructure and characteristics (such as culture, workforce, capacity, interdisciplinary teams, and partner engagement mechanisms) to support implementation of evidence
- Studies of tools, methods, or strategies to assist health system leadership, clinicians, and staff in assessing capacity and readiness, for selecting what evidence-based interventions to implement, how to conduct the implementation, and whether the implementation was successful and sustainable, including timely economic modeling for decision-making and evaluations of health system implementation activities
- Studies examining how to efficiently and effectively adopt and adapt clinical practice across multiple levels of the healthcare system in response to new evidence or guidelines, with consideration of access and outcomes for all impacted individuals and use of innovations such as artificial intelligence
- Studies examining the dynamics of change, including rapid response to an unexpected and/or time-sensitive event (e.g., emergency, extreme weather, patient safety need, or policy change), and the impact on or facilitation of/impediment to implementation of evidence-based interventions within health systems
- Learning health system or embedded health care research at the system level, including methods to promote scalability across other health systems and studies of implementation strategies or strategy packages deployed across multiple learning health systems
- Studies that develop and/or test digital technology or other innovations such as artificial intelligence solutions that support pragmatic evidence-based care delivery and optimal strategies for implementing them; for example, clinical decision support (CDS), integrating

data from patient-generated health data tools (e.g., mHealth, eHealth, patient portals), shared decision-making, and data visualization methods for clinician-facing health information

Global Dissemination & Implementation Science

- Studies that develop, test, adapt, and/or evaluate implementation strategies to suit one or more global contexts, including opportunities for cross-context learning and adaptation
- Studies that develop and test approaches for scale-up and sustainability of implementation strategies, including opportunities for reciprocal learning from resource constrained settings
- Embedded implementation studies exploring collaborative research partnerships within implementation practice to enhance relevance, impact, and real-world application
- Methods for engaging leaders, policymakers, implementers, and/or communities, and the issues influencing stakeholder involvement
- Approaches to de-implementation and re-implementation of interventions and strategies across contexts
- Conceptual and empirical work from and by the Global South that extend the value of frameworks, methods, research designs, and approaches in dissemination and implementation science
- Approaches to disseminating evidence across local, regional and global settings, including empirical testing of strategies that support cross-context learning and influence policy and practice

Health Policy Dissemination & Implementation Science

- **Policy Actors:** Studies assessing Big 'P' or little 'p' decisionmakers' roles, responsibilities, and behaviors of those who are involved in the policymaking, disseminating, or implementation processes. Studies that investigate multi-level, cross-context factors that influence policy actors' evidence use behaviors
- **Implementation or dissemination processes:** Studies that assess the implementation processes of translating evidence-informed policies into health and social services. Studies should have a clear dissemination or implementation science approach
- **Implementation strategies.** Studies that test the utility or effectiveness of implementation strategies for their ability to reduce the research to policy gap or enhance the implementation success of an evidence-informed health policy. Studies that test implementation strategies for their utility in de-implementing harmful or outdated health policies.
- **Dissemination strategies.** Studies that test the utility or effectiveness of dissemination strategies for their ability to reduce the research to policy gap, enhance the use of evidence in the policymaking process, or deliver evidence to invested policy actors and those impacted by implemented policies (e.g., citizens, members/clients of a health system or organization)
- **Adaptations.** Studies exploring policy-relevant adaptations in dissemination or implementation efforts and across diverse contexts—such as low-resourced environments and organizations that serve low-income communities. This can include studies assessing the influence of politics, polity structures, and socio-political forces on evidence-informed policy development and implementation.
- **Theory and methods.** Studies that advance the science of policy D&I, including development of policy-relevant: frameworks, implementation outcomes, implementation strategies, data collection, analytic methods, and partnership/collaboration building approaches for policy implementation efforts

Models, Measures, and Methods

- Critique, refinement, and development of dissemination and implementation theories, frameworks, and models (TMFs), including integration across TMFs
- Advances in measurement for implementation science, including development, validation, and pragmatic use of measures (e.g., implementation outcomes, context, sustainability)
- Innovative methods for studying implementation, including mixed methods, causal inference, and adaptive or multilevel designs
- Application of TMFs, measures, or methods to key priorities, such as de-implementation, sustainability, scale-up and spread, multisectoral implementation, and addressing health disparities
- Integration of data science and AI into implementation research, including use of large-scale data and approaches to ensure ethical AI

Prevention and Public Health

- Illustration of innovative implementation research that promotes the uptake of prevention and public health interventions and policies in the context of urgent public health issues
- Advancement of implementation strategies and/or implementation research designs that incorporate multilevel, whole of community, and/or multisectoral factors in prevention and public health settings that address real-world constraints and trade-offs.
- Demonstration of methods to promote the engagement of communities and multi-sectoral partners in the design, implementation, dissemination, scale-up, and sustainability of evidence-based prevention and public health interventions in underserved, rural, and low-resource settings
- Development and testing of innovative implementation strategies to improve the reach, accessibility, adoption or adaptation, and implementation of evidence-based practices for prevention, health behavior, and public health that address real-world constraints and trade-offs.
- Dissemination research that unpacks how information about prevention and public health interventions reaches communities, practitioners, organizations, and other consumers.
- Testing of implementation theories, models, frameworks, and measures (especially practical tools limiting participant burden, in community and non-clinical settings

Scaling and Implementing Evidence-Based Health Interventions to Reduce Disparities

- Community, system, or population level implementation of evidence-based interventions or practices to reduce disparities in service access, delivery, quality, or health outcomes
- Solution-focused health disparities research on strategies to adapt evidence-based interventions for delivery at scale that maintain core components and fidelity
- Strategies to implement evidence-based practices and guideline-concordant care in low-resource healthcare and other service settings, including settings in rural communities
- Examination of reach and uptake of evidence-based practices or interventions for groups with documented health disparities
- Sustainability of evidence-based interventions within settings and systems to address documented health disparities