

Background:

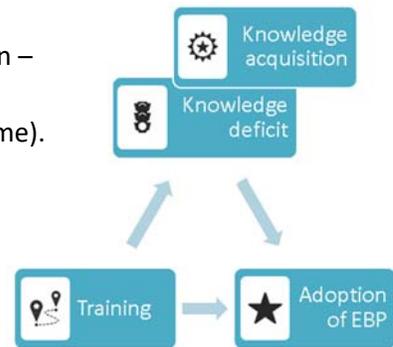
The **Mechanisms Network of Expertise (MNoE)** was created out of an R13 funded by the Agency for Healthcare Research and Quality (AHRQ; R13HS025632). This group of 30 international experts in implementation science and 8 US-based trainees will convene on an annual basis from 2019-2021 in a collaborative Deep Dive series. The goal of this group is to develop and disseminate a research agenda for the study of implementation mechanisms to advance the ability of health systems to implement evidence-based practices (EBPs) to improve the quality, safety, and efficiency of healthcare.

What is a mechanism?

Mechanisms are the processes or events through which an implementation strategy operates to affect desired implementation outcomes¹. In other words, mechanisms are the reasons why a change occurred or how a change came about.

An example of an individual-level mechanism is knowledge acquisition – training (strategy) may target a knowledge deficit (determinant) via knowledge acquisition (mechanism) to improve EBP adoption (outcome).

An example of an organizational-level mechanism is implementation climate – a leadership-oriented strategy may target low implementation climate (determinant) via improved implementation leadership behaviors (mechanism) to improve EBP fidelity (outcome).



Why study mechanisms?

Implementation science has amassed an expansive inventory of determinants² and a compilation of strategies³, yet despite this growing knowledge, nearly 2/3 of implementation efforts fail⁴. With implementation interventions becoming more complex and expensive, it is imperative to understand why strategies elicit, or fail to elicit, desired outcomes. Although the study of mechanisms is gaining more attention, a better understanding of implementation mechanisms is sorely needed. Two systematic reviews⁵. Lewis et al. under review of implementation mechanisms in health and mental health found 50 studies of mechanisms. However, design, measurement, and analysis limitations prevented any from successfully meeting all 7 criteria (e.g. plausibility, timeline, manipulation, gradient, strong association, specificity, consistency) for establishing¹ a mechanism.

The MNoE aims to identify challenges to studying implementation mechanisms, priorities for research and practice, possible solutions to address the challenges and answer pressing research questions, and create clear products to guide future work.

What to expect at SIRC:

The **first MNoE breakout session** will provide additional background on the MNoE and the study of mechanisms. The majority of the session will be spent in group discussion to elicit gaps and challenges to studying mechanisms and promising paths forward.

The **second breakout session** will include brief stimulus talks from the MNoE workgroup leads, followed by a brief introduction to a case study. Participants will spend most of the session in breakout groups working through the case study, coming together at the end of the session for summary discussion.

Want to learn more? Check out these additional resources:

[From Classification to Causality: Advancing Understanding of Mechanisms of Change in Implementation Science](#)

[Multilevel Mechanisms of Implementation Strategies in Mental Health: Integrating Theory, Research, and Practice](#)

[Setting the Stage for Understanding Mechanisms of Implementation \(webinar and slides\)](#)