

# Challenges in Measuring Implementation Success

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## Think tank objectives:

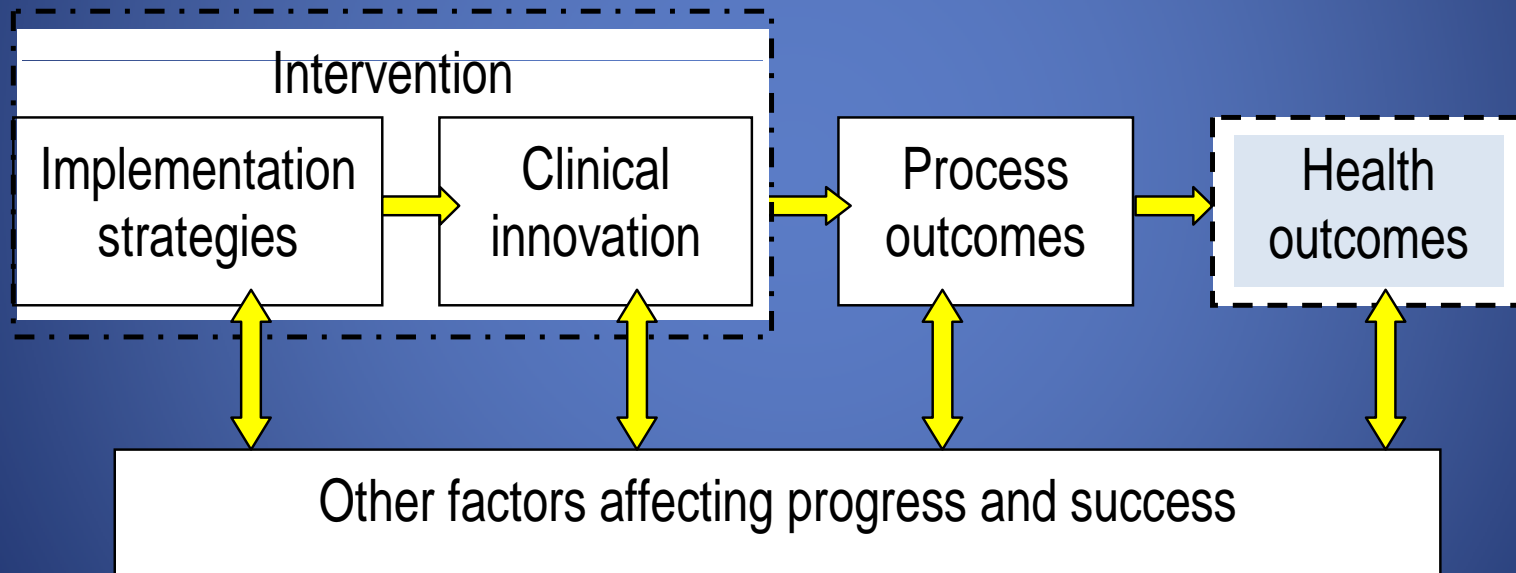
Stimulate discussion about terminology and a shared framework

- How do we define implementation success?
- Against what shared standards should implementation success be judged?

Explore issues in measuring implementation success

- How do we set the standards for a specific study?
- How do we define a complex intervention in operational terms to measure it?
- What are appropriate measurement approaches?

# Implementing a clinical innovation:



# Why do we care?

- Essential to judging effectiveness of strategies for implementing innovative programs
  - Implementation success as **dependent** variable
- Understanding factors affecting implementation
  - Implementation success as **independent** variable

# How do we define implementation success?

- ***Implementation success*** is the presence of the innovation as intended in the delivery context
- ***Measuring implementation success*** is formally determining that presence

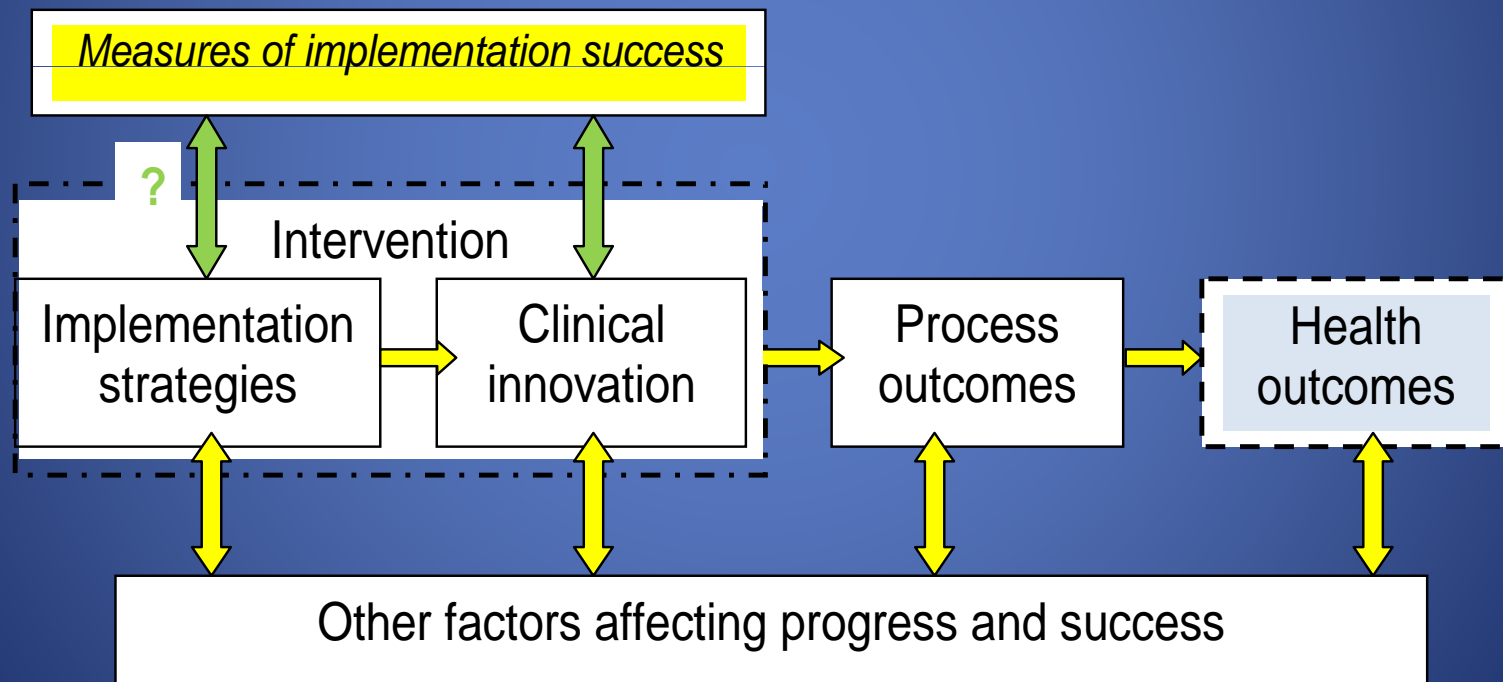
# What is implementation strategy v. innovation v. outcomes?

- Examples:

<i>Study</i>	<i>Implementation strategy</i>	<i>Innovation</i>	<i>Process outcome</i>
<b>Bipolar CCM</b>	Replicating effective programs (REP)	Collaborative chronic care model (CCM)	Guideline concordant anti-manic treatment
<b>Organizational collaboration for hand-hygiene</b>	External facilitation	Organizational model for strengthening implementation of evidence-based practices	Hand-hygiene compliance

- Does this work with your projects?

Does the concept of implementation success apply to implementation processes as well as to the innovation?



# Against what shared standards should implementation success be judged?

- **Fidelity** -- Adherence, Scope/reliability, Intensity/dose, Quality of program, Participant responsiveness, Sustainability
- **RE-AIM** – Reach, Effectiveness, Adoption, Implementation, Maintenance
- Are these standards appropriate in all situations?
- Are there other standards again which implementation should be judged?

# How do we set the standards for a specific study?

- Example: Treating tobacco use and dependence

*Ask-Advise-Assess-Assist-Arrange*

- What have you done? How did you decide which to use?

# How do we operationalize a complex intervention to measure it?

- Key elements
  - Important for implementation as well as measurement
  - Replication v tailoring/ customization/ adaptation
- Which features are core to the intervention?
  - Which features have to be present for the intervention to maintain its effectiveness?
  - Which can vary without compromising effectiveness?

# How do we operationalize...?

- Example: Testing an organizational model to improve hand-hygiene compliance
  - Concept of key elements built into theoretical framework
  - Implementation plan by recipients
  - Ratings by research team
- How have you done it?

# What are appropriate measurement approaches?

- Secondary v primary data?
  - Availability of existing data
  - Resource & logistical constraints of collecting new data
  - Qualitative, quantitative
- Who collects?
  - Scale of intervention & role of researcher
  - Expectations/burden of implementation staff collection

# What measurement approaches are appropriate in what settings?

- Example: ASK
- Data sources:
  - electronic records
  - new practice survey
  - chart review
  - coded qualitative data from interviews or documents

# What measurement approaches are appropriate in what settings?

- Example: ASK
- Levels of analysis:
  - how often an individual patient is asked about tobacco use?
  - number of clinics which implemented a system for universal identification of tobacco use
- How have you measured implementation success?

Recap...