Implementation Science:
Definitions and key concepts

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Bridging the Gaps

Research to practice gap

What is known, is not what is adopted

Implementation gap

Not delivered as intended; not delivered at scale; not sustainable

Research (knowledge)

Practice

Broad scale outcomes

17 years, 14%

What is IMPLEMENTATION?

The process of putting to use or integrating evidence-based interventions within a setting.

Rabin et al., 2008. Public Health Manag Pract 14(2), 117-123
The process by which health interventions shown to be efficacious on a small scale or under controlled conditions are expanded under real world conditions into broader policy or practice.

Milat, Bauman, & Redman, 2015. Implement Sci 10: 113
What is IMPLEMENTATION SCIENCE?

The scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practices, and hence, to improve the quality and effectiveness of health service (& promotion).

Eccles & Mittman, 2006. Impl Sci 1(1)
...regardless of how valuable clinical interventions may be, they scarcely implement themselves.
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What are IMPLEMENTATION STRATEGIES?

Methods or techniques used to enhance adoption, implementation and sustainability.

Proctor et al. 2013 Implement Sci 8:139
In non-scientific language…

» The innovation is **THE THING**

» *Effectiveness* research looks at whether **THE THING** works

» *Implementation* research looks at how best to help people/places **DO THE THING**

» Implementation strategies are the **stuff we do** to try to help people/places **DO THE THING**

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Curran 2020. Implement Sci Commun 1(1)
Where does implementation research fit?

Has the intervention or practice of interest shown efficacy?
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- **Intervention or practice of interest**
  - **No**
    - Efficacy Research (Design for implementation)
  - **Yes**

Has the intervention or practice of interest shown efficacy?
Where does implementation research fit?

1. **Intervention or practice of interest**
   - ![Diagram](https://impsciuw.org/implementation-science/research/frame-your-question/)

   - **Has the intervention or practice of interest shown efficacy?**
     - **No**
       - Efficacy Research (Design for implementation)
     - **Yes**
       - ![Diagram](https://impsciuw.org/implementation-science/research/frame-your-question/)

Lane-Fall et al. 2019. BMC Medical Research Methodology 19(1), 133

Image: https://impsciuw.org/implementation-science/research/frame-your-question/
Where does implementation research fit?

![Diagram with decision paths]

Lane-Fall et al. 2019. BMC Medical Research Methodology 19(1), 133
Image: https://impisciuw.org/implementation-science/research/frame-your-question/
Theoretical approaches in implementation science

- **Process**
  - Describe / guide the process of implementation

- **Determinant**
  - Understand / explain what factors influence implementation

- **Evaluate**
  - Evaluate implementation

Example: Determinant

Community Factors

Provider Characteristics

Innovation Characteristics
(Choose to Move)

McKay et al 2017. TJACSM 2(2): 10-19
Determinants: Range of contextual factors that influence implementation and scale-up (Durlak & DuPre, 2008. American J Community Psych.)

Outcomes: Effects of deliberate actions to implement and scale-up an intervention (Proctor et al., 2011. Adm Policy Ment Health.)
IMPLEMENTATION MATTERS!
Thank you!

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