From Concept to Impact:
Exploring Implementation Models & Frameworks

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From concept to impact: Exploring implementation models and frameworks

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ABOUT ME

• Assistant Professor at Washington University in St. Louis

• Most of my work falls into 2 categories:
  ○ Implementation Science measurement and methods
  ○ Pediatric hospital care

• Licensed Clinical Social Work (Emergency Room)
Assumptions I’ve Made About Today:

01. You’ve probably heard about why we think implementation science is important.

02. You have heard something about implementation science outcomes.

03. You’ve likely had someone tell you about the 17 years statistic.

04. You have something that you’re passionate about improving, making better, or using implementation science to better understand.
We want to translate research (and use a scientific study of methods, strategies, and frameworks) to make sure that evidence based care and interventions get to everyone needs it.
AGENDA

Understanding Theories, Models, and Frameworks

Theoretical Foundations of Implementation Science

Models and Frameworks in implementation Science

Selecting and Applying Implementation Frameworks

Conclusion
UNDERSTANDING THEORIES, MODELS, AND FRAMEWORKS
# REASONS TO USE

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<thead>
<tr>
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<th>Reason</th>
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<tbody>
<tr>
<td>01</td>
<td>Conceptual Clarity</td>
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<td>02</td>
<td>Planning</td>
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<td>03</td>
<td>Generalizability</td>
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<td>Study Design and Hypothesis Generation</td>
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<td>05</td>
<td>Helps with replication</td>
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<td>06</td>
<td>Advancing the field</td>
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<td>07</td>
<td>Integration of findings</td>
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<td>08</td>
<td>To reach impact!</td>
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A FEW NOTES:

Note 1
This is just a starting place - it’s not perfect.

Note 2
Adaptation is often necessary, and normal. You can (and sometimes even really should) adapt these to apply in your setting.

Note 3
Often in implementation research, we use theories/models/frameworks interchangeably. But... they are different. Today, I will try to create some distinction.
NILSEN HELPS US THINK ABOUT HOW TO DIFFERENTIATE TYPES OF T/M/F’S

Process
describe and guide how research gets integrated into practice, very practice oriented (Knowledge-to-Action framework); often offer guidance that is concrete, practical

Determinant
describe constructs, domains of determinants that influence implementation outcomes; usually lists of barriers and facilitators (CFIR, PARIHS)

Classic theories
Theories from other fields (often psychology, organizational theory) that have been applied within implementation science; describe change and how change occurs, often in individual level (Social Cognitive Theory, Theory of Planned Behavior)

Implementation Theories
theories developed within the field of implementation science that attempt to describe implementation (Normalization Process Theory; COM-B)

Evaluative frameworks
provide structure for evaluation and how to specify things that should be considered for implementation aspects of studies and projects (RE-AIM, Proctor et al outcomes)

Nilsen, Implementation Science, 2015
THEORETICAL FOUNDATIONS OF IMPLEMENTATION SCIENCE
THEORIES

• Provide the most broad understanding of a phenomena
• Identify the relationship between underlying concepts and ideas
• Attempts to explain a set of related ideas, concepts
EXAMPLE: DIFFUSION OF INNOVATIONS THEORY

Rogers’ theory that explains the basis of dissemination - how things spread, why, and who the actors are

**Explain Process**

background on the dynamics of adoption, identify the actors of interest

**Strategy Selection**

Identifying characteristics that are important for an intervention, or who ought to be targeted in the strategy, provide guidance on the communication strategies
FRAMEWORKS IN IMPLEMENTATION SCIENCE
DETERMINANT FRAMEWORKS

• Help us consider context
  ◦ Inner and outer setting
• You don’t have to use a framework at all levels
• Often used to assess barriers/facilitators
  ◦ Assets and opportunities
• Consolidated Framework for Implementation Research (CFIR)
  ◦ CFIR 2.0 - equity focus
  ◦ Website (qualitative guidance)
Consolidated Framework for Implementation Research (CFIR) 2.0

**Outer Setting**
- Critical incidents
- Values and beliefs
- Systemic conditions
- Policies and laws
- Partnerships and connections
- Financing
- External pressure

**Inner Setting**
- Structural characteristics
- Relational connections
- Communications
- Culture
- Tension for change
- Compatibility
- Relative priority
- Incentive systems
- Mission alignment
- Available resources
- Access to knowledge about the Innovation

**Implementation Process**
- Teaming
- Assessing Needs
- Assessing Context
- Planning
- Tailoring Strategies
- Engaging
- Doing
- Reflecting & Evaluating
- Adapting

**The THING (Innovation)**
- Source
- Evidence-Base
- Relative Advantage
- Adaptability
- Transferability
- Complexity
- Design
- Cost

**Individuals**

- Opinion leaders
- Innovation recipients
- Implementation facilitators
- Implementation leads
- Innovation deliverers
- Innovation beneficiaries
- Implementation team members
- Other implementation support

**Roles**
- High-level leaders
- Mid-level leaders

**Barriers and Facilitators**
- Need
- Capability
- Opportunity
- Motivation

*Figure adopted by The Center for Implementation | V2024.01*

RE-AIM: AN EVALUATION FRAMEWORK

What does it do?
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras erat nibh, sollicitudin vitae mattis quis, interdum sit amet lorem.

Cool things to know
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras erat nibh, sollicitudin vitae mattis quis, interdum sit amet lorem.

RE-AIM/PRISM & Sustainability
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras erat nibh, sollicitudin vitae mattis quis, interdum sit amet lorem.
Adapted TSBM framework
Implementation Research Logic Model
Emerging Frameworks

Adaptation

Health Equity
EXAMPLES AND APPLICATIONS
Example of using multiple T/M/F

CONFUSED BY TOO MANY CHOICES
SELECTING AND APPLYING THEORIES, MODELS, AND FRAMEWORKS
SELECTING T/M/F

- Understand the level at which your study is intervening, assessing
- Consider the extent to which you are assessing dissemination or implementation
- Are there common theories for your setting or research topic?
- *Be open to using different frameworks!* None of them are perfect.
WHERE TO USE T/M/F IN YOUR WORK

• Planning
• Practice (projects) or carrying out a project
• Reporting findings
• Should be used and integrated throughout
  ◦ Aims
  ◦ Design
  ◦ Measurement and outcome selection
  ◦ Evaluation and Analyses
• Using a T/M/F is not innovative, but it can help you consider innovation
**Constructs:**

**Website:**
https://cfrguide.org/

**Citations:**

**Examples:**


Learning Opportunities

Fundamentals Series
Monthly on the 2nd Tuesday
12:00-1:00 PM
Virtual

Works in Progress Series
Monthly on the 4th Tuesday
12:00-1:00 PM
In Person & Virtual

geiselmed.dartmouth.edu/dcis
linkedin.com/company/implementation-science
twitter.com/dartmouthimpcsi
implementation.science@dartmouth.edu

Join Our Network
Hosted by:
Jeremiah Brown, PhD, DCIS Director
Kelly Aschbrenner, PhD, DCIS Co-Director
Sarah Lord, PhD, DCIS Co-Director

**April**
*Measuring Context, Process, and Implementation*
Katie Rendle, PhD
*University of Pennsylvania*

**Tuesday, April 23***

**May**
*Implementation Frameworks: PRISM & RE-AIM*
Tina Studts, PhD
*University of Colorado*
Samantha Harden, PhD
*Virginia Tech*

**Tuesday, May 14**

**Recent Sessions**
Available at: geisemed.dartmouth.edu/dcis/past-events/

*Five Considerations for Formulating an Implementation Science Research Question*
Kelly Aschbrenner, PhD
**February 2024**
[Recording](#) | [Slides](#)

*Master of Implementation Science: Overview of the Proposed Program*
Jeremiah Brown, PhD
**January 2024**
[Recording](#) | [Slides](#)