



# Foundations in Implementation Science

Frameworks for Supporting  
Implementation

Leah Bartley

Oscar Fleming

Aisling Sheehan



The Centre  
for Effective  
Services

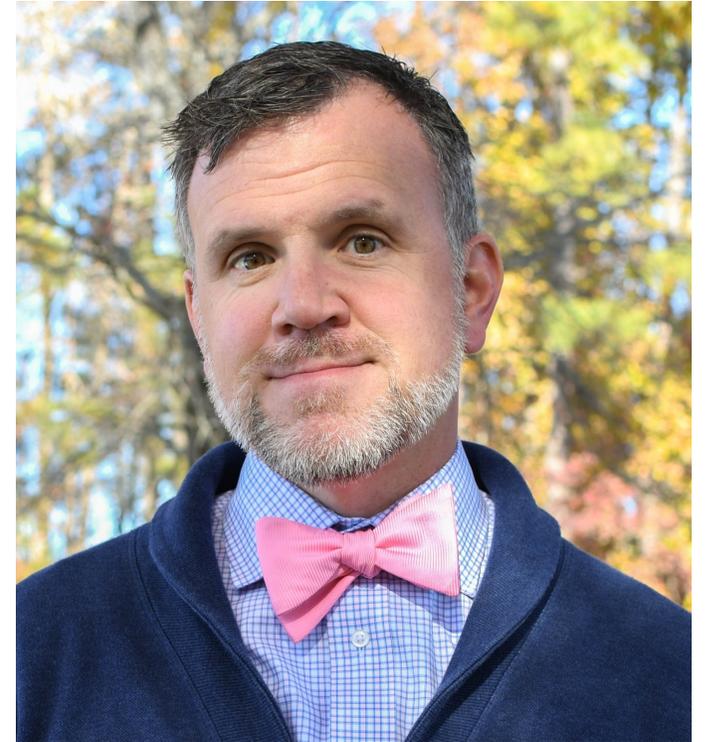
# Introductions

# Activity



## Impromptu Networking

1. Pair up with a 'stranger' near you
2. Ask...
  - I. "What big challenge do you bring to this gathering?"
  - II. What do you hope to get from and give this Institute?"
3. 2 minutes per person to answer the questions (4-5 minutes per round)
4. Two rounds



# Presenter Introductions

# Session Objectives

At the end of this session, participants will:

- ✓ Understand the purpose and use of implementation frameworks
- ✓ Increase their understanding of relevant implementation frameworks
- ✓ Consider research and practice application of implementation frameworks
- ✓ Consider how to critically assess frameworks
- ✓ Know where to find resources for further learning and application

# What Are Implementation Frameworks, and How Are They Used?

# Making Sense of Implementation Frameworks

## Theories

“a set of analytical principles or statements designed to structure our observation, understanding and explanation of the world.”

Include:

- Definitions of variables,
- a domain where the theory applies,
- A set of relationships between the variables and specific predictions

## Models

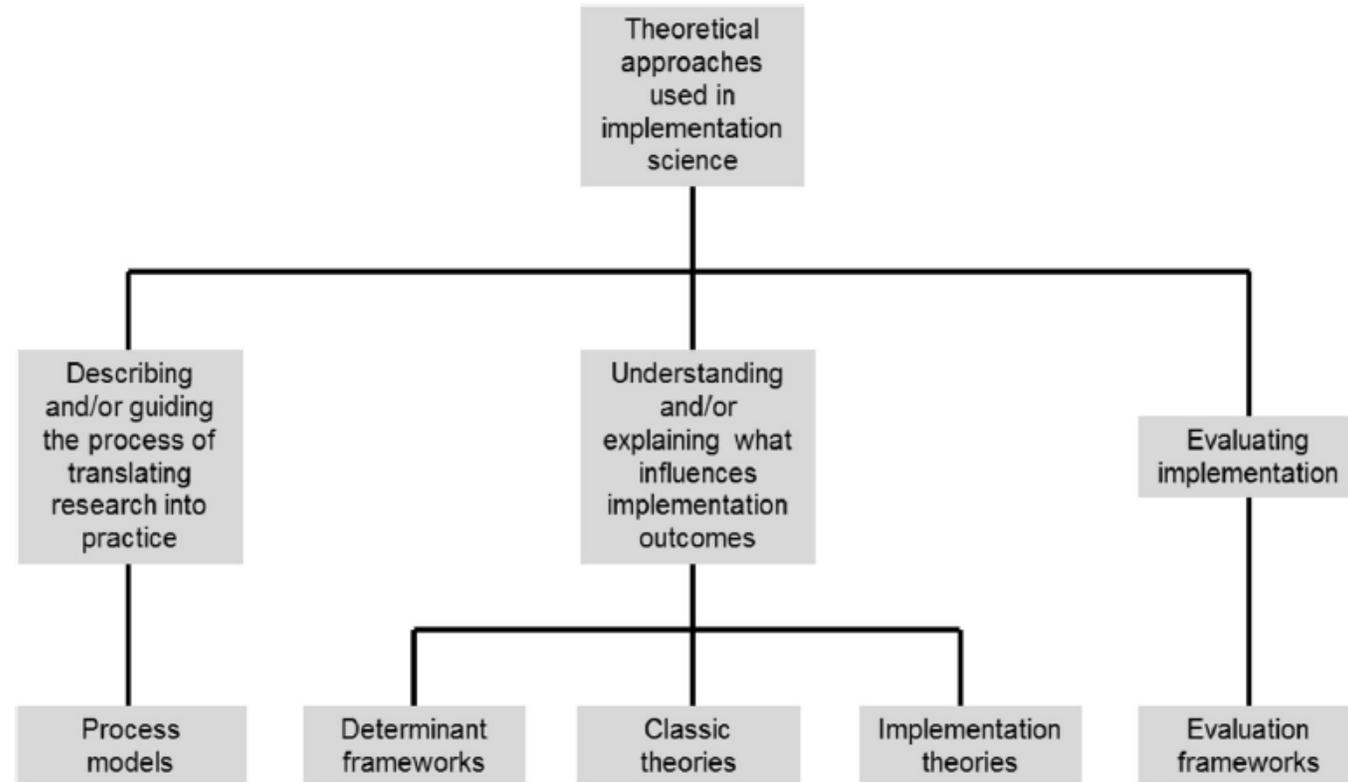
- Typically involves a deliberate simplification of a phenomenon or a specific aspect of a phenomenon.
- Need not be completely accurate representations of reality to have value
- A model is descriptive, whereas a theory is explanatory as well as descriptive

## Frameworks

- Usually denotes a structure, overview, outline, system or plan consisting of various descriptive categories, e.g. concepts, constructs or variables, and the relations between them that are presumed to account for a phenomenon.
- Frameworks do not provide explanations; they only describe empirical phenomena by fitting them into a set of categories.

# Three Aims of Theoretical Approaches in IS

- Process
- Determinants
- Evaluation



**Figure 1** Three aims of the use of theoretical approaches in implementation science and the five categories of theories, models and frameworks.

# Five Types of Implementation Frameworks

## Process Models

Guide the translation of research into practice

## Evaluation Frameworks

Specify aspects of implementation that can be evaluated

## Determinant Frameworks

Specify barriers and enablers that influence implementation outcomes

## Classic Theories

From external fields such as psychology, sociology and organizational theory

## Implementation Theories

Provide understanding of aspects of implementation

# Formal Theory & Common Sense, Informal Theory

## Formal Theory:

- Explicit and open to question and examination;
- If deductions from a theory are incorrect, theory can be adapted, extended or abandoned.
- More Consistent with existing facts than common sense ...a hypothesis based on an established theory is a more educated guess
- Furthermore, theories give individual facts a meaningful context and contribute towards building an integrated body of knowledge,

## Common Sense, Informal Theory:

- Usually consists of implicit assumptions, beliefs and ways of thinking and is therefore more difficult to challenge.
- More of an 'uneducated' guess
- More likely to produce isolated facts

# Progress With Use of Theory

- Moving from “an expensive version of trial-and error” to growing use
- “...theories borrowed from disciplines such as psychology, sociology and organizational theory as well as...from within implementation science.”



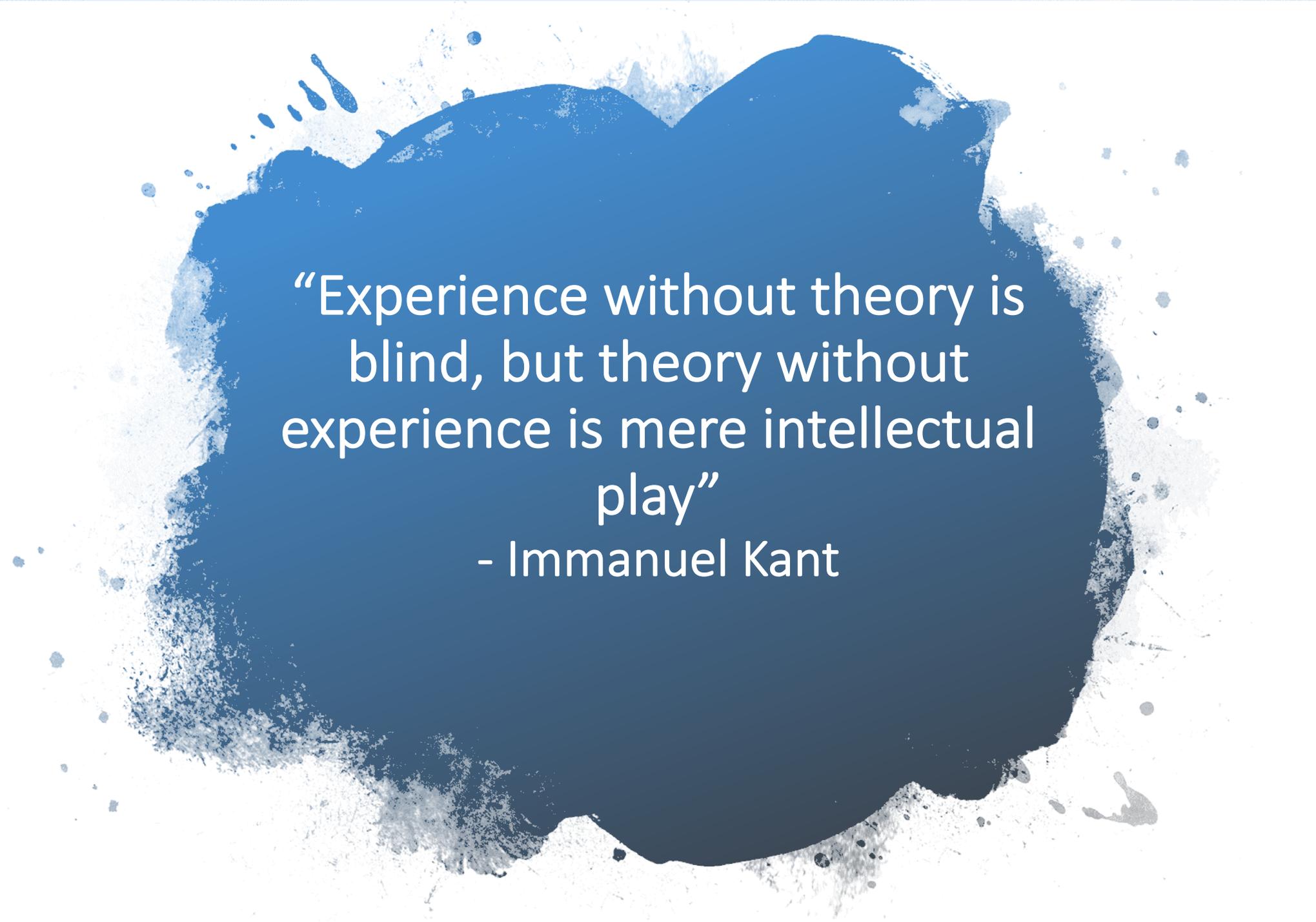
# Potential Blinders

Use of Theory may...

- Cause us to ignore problems that do not fit into existing theories, models and frameworks or...
- Hinder us from seeing known problems in new ways.

Theorizing...should not be an abstract academic exercise unconnected with the real world of implementation practice.





“Experience without theory is  
blind, but theory without  
experience is mere intellectual  
play”

- Immanuel Kant

More than 100 frameworks exist, making it difficult to know where to start

Theoretical Domains Framework

Availability, Responsiveness & Continuity (ARC)

A Six-Step Framework for International Physical Activity Dissemination

Implementation Outcomes

Pathways to Evidence-Informed Policy

PRISM  
PARIHS

Precede-Proceed Model

Active Implementation Frameworks

CDC DHAP's Research-to-Practice Framework

CFIR

Normalisation Process Theory

An Organisational Theory of Innovation Implementation

Behaviour Change Wheel

FAB Model

IHI Framework for Leadership Improvement

Multi-Level Conceptual framework of Organisational Innovation Adoption  
Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors

Interactive Systems Framework

Conceptual Model of Implementation research  
EPIS

RE-AIM  
PRONOVOST'S 4E'S PROCESS THEORY

Ottawa Model of Research Use

Interactive Systems Framework

Quality Implementation Framework

Davis' Pathman- PRECEED Model

# Reflection and Sharing



1. How many of you in the room have been involved in sourcing, appraising or evaluating implementation frameworks?
2. Lessons to share?
3. What additional resources would you suggest?

# Framework Use In Research and Practice

# Implementation Science

Implementation science includes **research** and **practice**

Implementation  
Research

Seeks to understand the approaches that work best to translate research to the real world

Implementation  
Practice

Seeks to apply and adapt these approaches in different contexts settings to achieve outcomes

(Ramaswamy, et al., 2019)

# Implementation Practice

## **Fundamental goal of implementation science:**

To integrate research and practice experience in ways that improve the outcomes of those being served.

[Estabrooke and colleagues](#)

### ***Implementation Practice:***

The application of evidence emerging from implementation research by people (individuals and teams) with the skills and competencies to tailor implementation frameworks, strategies and approaches to different contexts and settings to meet the unique needs of communities and people and to achieve improved and equitable outcomes.

### ***Equitable implementation:***

Occurs when strong equity components (including explicit attention to the culture, history, values, and needs of the community) are integrated into the principles and tools of implementation science to facilitate quality implementation of effective programs for a specific community or group of communities.

**Implementation scientists must work with all communities and embrace the diverse experiences that both drive and shape implementation efforts. This requires competent implementation practice and an explicit commitment to equity.**

# Using Frameworks

## How Implementation Practitioners and Researchers Might Use Frameworks

### Implementation Practitioners:

- Consider implementation strategies (e.g., coaching or learning communities)
- Develop structures (e.g., teams or leaders)
- Consider relevant stage-based activities
- Identify outputs and outcomes

### Implementation Researchers:

- Form research questions through theory and previous research
- Develop methodology
- Identify measures and metrics
- Interpret research findings

# Implementation Frameworks in Child, Youth, and Family Services

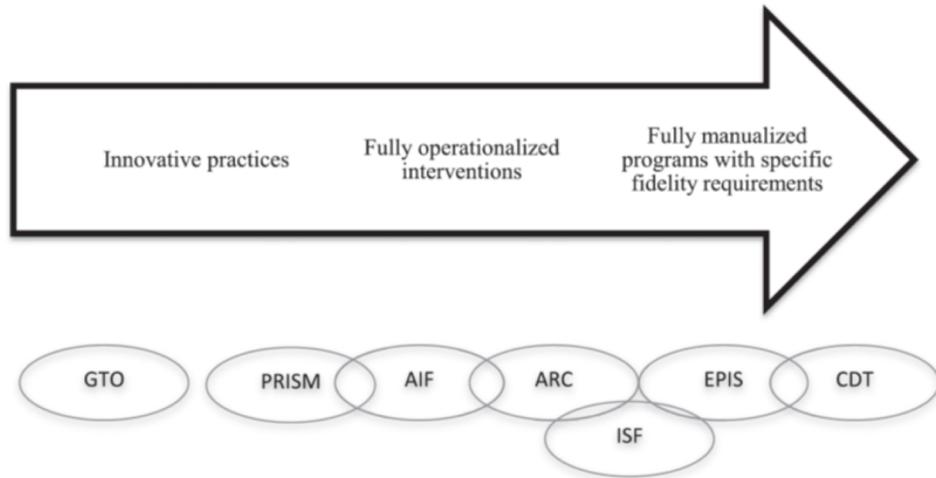
## Purpose of the Review:

- Identify studies employing an implementation framework in this field;
- Map the literature to better understand these frameworks and the ways in which they are being applied;
- Ascertain the ways in which implementation frameworks are being tested; and
- Describe the current state of evidence surrounding their use in the field.

# Albers et al., Review of Frameworks

1. **Purpose:** For which purpose was the framework developed?
2. **Process:** Over time, how does the process (i.e., ordering, timing, duration) of implementation unfold?
3. **Key influences:** At any given time during implementation, which key influences will potentially impact implementation quality?
4. **Stakeholders:** Which stakeholders are described as essential to implementation processes?
5. **Capacity:** How is 'capacity' to support implementation processes conceptualized as part of the framework?

# Review Results



| Domain  | Question  | Findings   |
|---------|---|--|
| Purpose | For which purpose was the framework developed?  | <ul style="list-style-type: none"> <li>Developed within specific contexts and with specific purposes in mind.</li> <li>None developed or applied outside the U.S. context.</li> <li>Few studies that tested implementation frameworks using rigorous designs.</li> </ul> |
| Process | Over time, how does the process (i.e. ordering, timing, duration) of implementation unfold? | <ul style="list-style-type: none"> <li>Agreement among framework developers that implementation takes place in stages.</li> </ul>  |

Albers, B., Mildon, R., Lyon, A. R., & Shlonsky, A. (2017). Implementation frameworks in child, youth and family services – Results from a scoping review. *Children and Youth Services Review, 81*(July), 101–116.

# Review Results

| Domain         | Question  | Findings  |
|----------------|---|---|
| Key influences | At any given time during implementation, which key influences will potentially impact implementation quality? | <ul style="list-style-type: none"><li>• ...Build on a range of key influences needed to support implementation at any given point in time, and do so with differing levels of specificity.</li></ul>  |
| Stakeholders   | Which stakeholders are described as essential to implementation processes?                                    | <ul style="list-style-type: none"><li>• Variety of stakeholders potentially involved in 'real life' implementation work</li><li>• Description of and emphasis on various stakeholder groups varies</li></ul>  |
| Capacity       | How is 'capacity' to support implementation processes conceptualized as part of the framework?                | <ul style="list-style-type: none"><li>• Most frameworks highlight the need to create 'implementation capacity' to enable, facilitate, and support the implementation work of organizations and systems.</li><li>• Change agents and Implementation teams</li><li>• Intervention/EBP specific know how vs. Implementation skills</li></ul> |

## Types of Stakeholders

1. **Frontline level** - involved in the delivery of services to end-users. (end-users/'service recipients', and staff delivering these services)
2. **Organizational level** - involved in supporting the service delivery at the front line.
3. **Community level** - an inter-organizational space in which service providers connect with other agencies and individuals to jointly support the implementation of evidence-based practices.
4. **Policy level** - involved in funding and policy decision-making that enables the implementation of EBPs at the other levels of the implementation system.

# Findings



- Very little evidence to inform users about which frameworks to use, when, and in what way.
- Little empirically-driven clarity about the ways in which individual elements of frameworks work together.
- Scarce on information on how to identify, rank, link, or engage different stakeholders, how to define their functions, and how to understand the ways in which they interact during implementation processes.
- The policy level of implementation is the one least discussed and explored in the studies.

# Recommendations



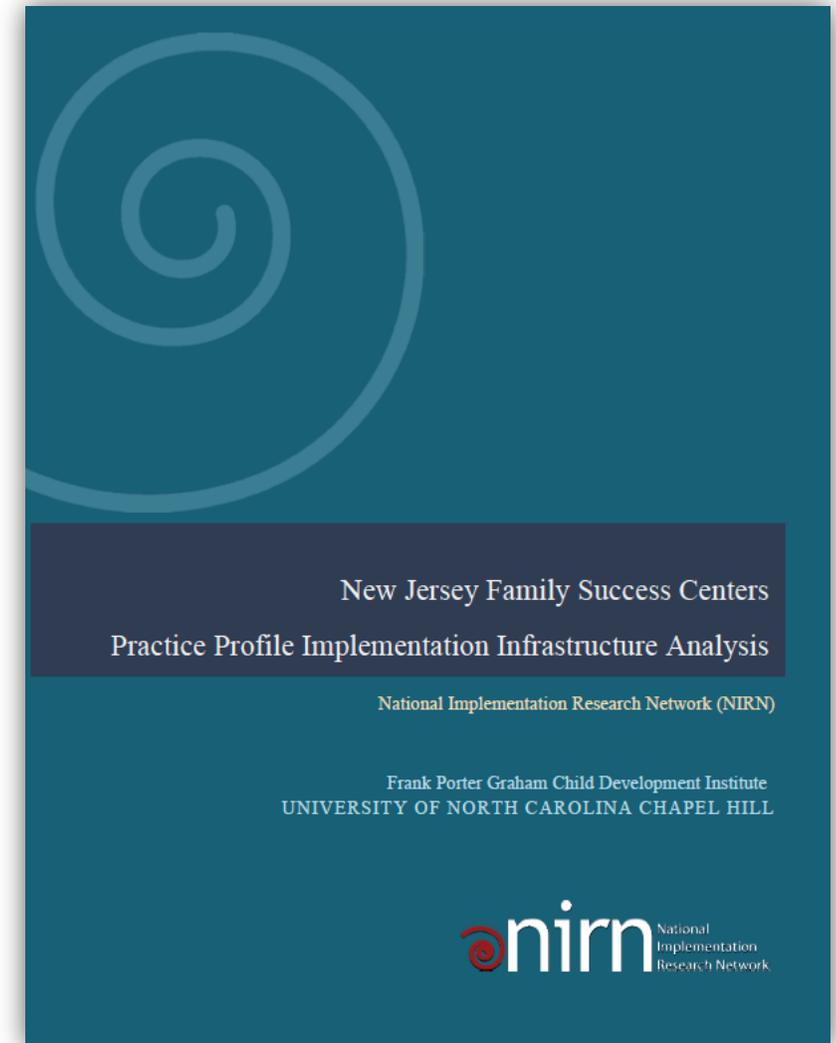
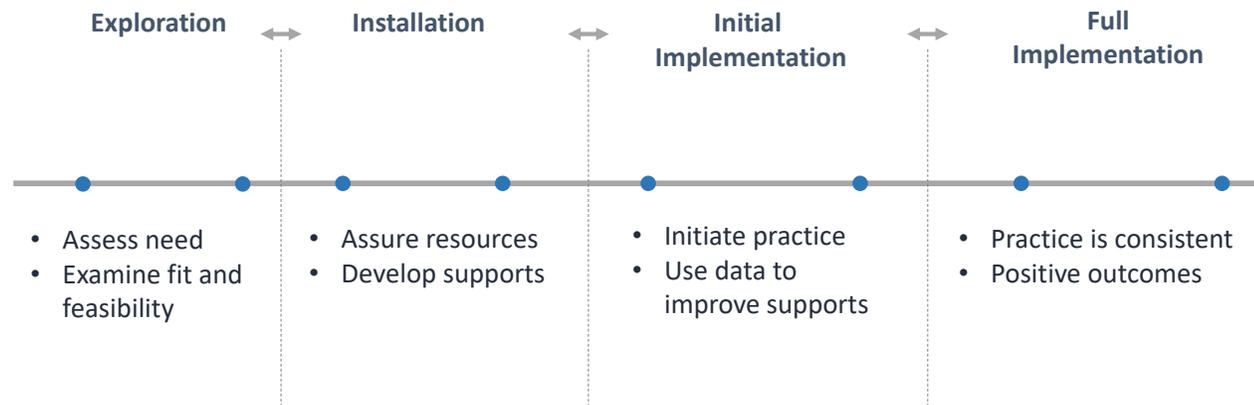
- The selection of frameworks as practical implementation tools should be based on information about [the] contexts and purpose for which it was developed
- Implementation frameworks could be improved in two ways:
  - Their inherent factors could be better grounded in theory leading to solid logic modeling.
  - They could better differentiate the importance and timing of specific factors
- Modular/Core Elements vs. Frameworks

BREAK

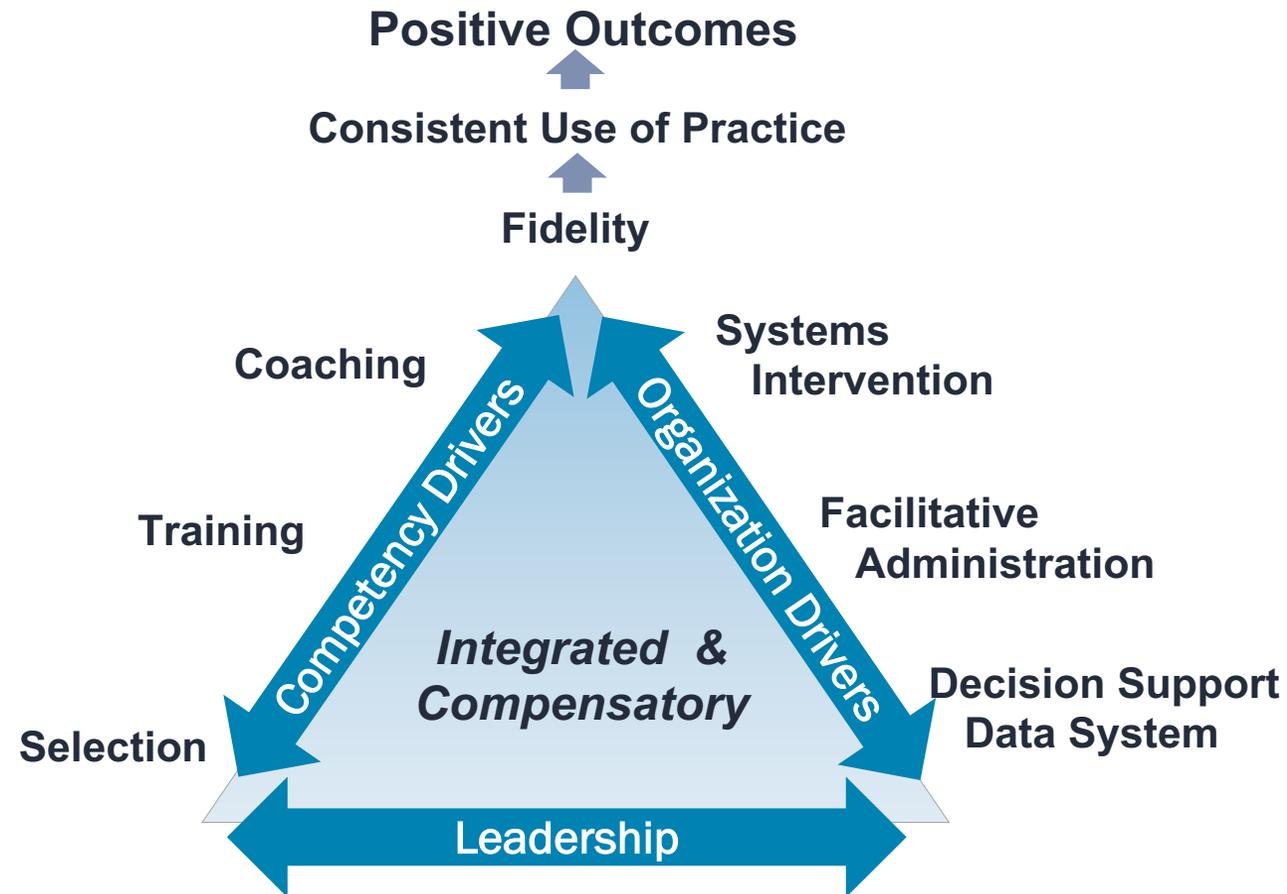
# Examples of Frameworks in Practice and Research

# New Jersey Department of Children and Families

## Implementation Stages



- Used a qualitative implementation drivers assessment
- The FSC Phase II Implementation Team identified key informants for each implementation driver.
- A total of 17 interviews were conducted with representation of key informants from DCF, FSCs, host agencies, the training academy and university partners
- In advance of the interviews, key informants received an overview of the implementation drivers. At the beginning of each interview, we reviewed the FSC practice profile development process and briefly discussed the goals of the interviews and analysis.
- Interviews were recorded in order to corroborate detailed interview notes that were captured by the interviewers. Interview data was input into an excel database and coded for themes across interviews.



- Report summarized results of qualitative analysis and opportunities to strengthen each driver
- Recommendations provided an overview of implementation plan and team development
- Implementation Team participated in a facilitated exercise to prioritize driver development based on prioritization criteria

| <b>Driver Prioritization Results</b>   |  |
|--|--|
| <p>The results of the Driver prioritization activity. Frequency of quick win and long-term wins are provided in the (). Those in orange indicate quick win totals, green indicate long term win totals. Those that had both quick and long-term win votes were categorized based on the highest vote category.</p> |  |
| <p><b>Competency Drivers</b> - <i>Competency Drivers are mechanisms to develop, improve, and sustain staff abilities to implement the FSC practice profile as intended, so that local communities benefit and well-being outcomes for children, youth, and adults improve.</i></p>                                 |  |
| <b>Selection</b>   | <ul style="list-style-type: none"> <li>• (7) Ensure the practice profile is reflected in hiring and interview protocols and that those protocols are used across the network. Build on existing effective protocols to align with the practice profile. Assist FSCs whose protocols are not strong in adopting existing best practices.</li> <li>• (5) Increase annual funding in order to support FSCs in retaining quality staff.</li> </ul>   |
| <b>Training</b>  | <ul style="list-style-type: none"> <li>• (7) Provide skill-based training on the Practice Profile essential functions. Essential functions could be prioritized. A component of this training could include tools for each FSC to use on their own with their center's staff.</li> <li>• (5) Ensure ongoing opportunities to train and engage host agencies. This begins with training host agencies on managing an FSC and leading the prevention work envisioned by the FSC model. There might be some essential functions of particular relevance to the host agency level of the FSC Network (e.g., leadership and continuous quality improvement).</li> <li>• (1) (5) Some FSCs noted the importance of training for their advisory boards regarding their role and how they can support strong community connections for FSCs. Some FSCs would value assistance from DCF with this training.</li> </ul>  |
| <b>Coaching</b>  | <ul style="list-style-type: none"> <li>• (2) (2) The FSC assessment tool should be adapted to reflect the practice profile so that the results could be used to inform the focus of coaching plans and technical assistance. Coaching plans could be developed for each FSC, with a focus on the specific essential functions on which the FSC needs to improve. This would create a consistent and objective means of allocating coaching/TA resources where they are needed most. It would also help identify the strengths of FSCs that could be asked to deliver coaching and TA.</li> <li>• (4) (2) Similarly, tools and processes used by FSCs to assess their individual staff should be aligned with the practice profile. Individual coaching plans could then be developed based on assessment results. Providing FSC directors (and others in supervisory roles) with training and ongoing support on coaching best practices would strengthen local FSC capacity to sustain coaching efforts.</li> </ul> |

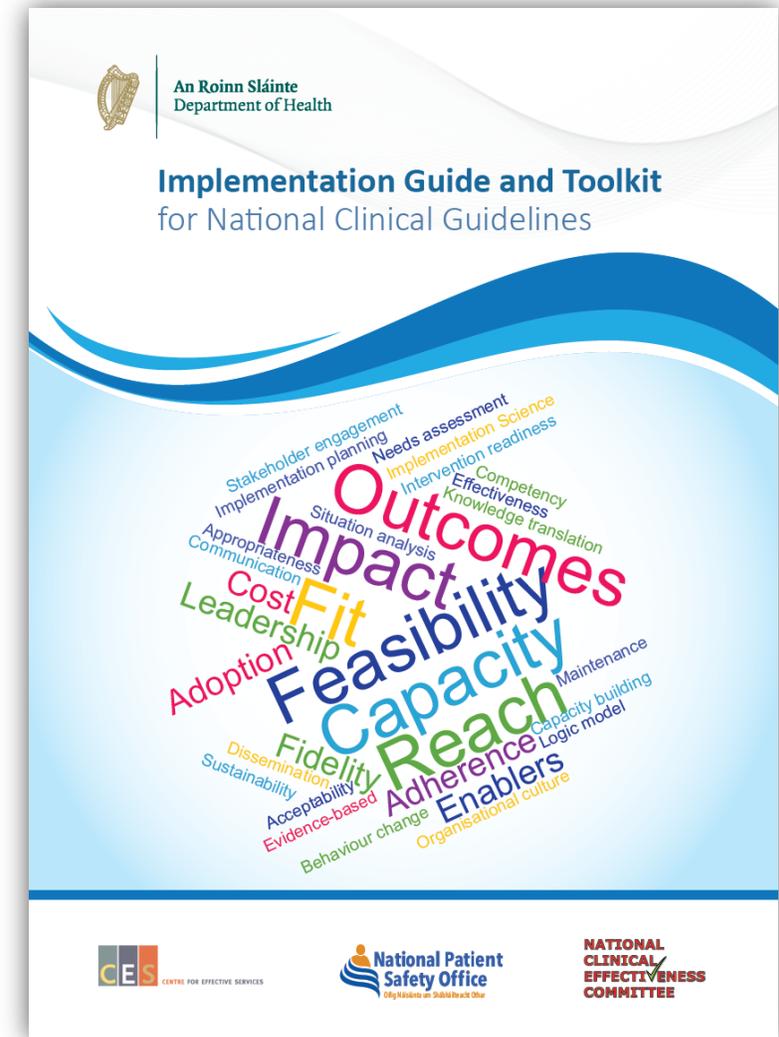
# Department of Health, Ireland

*Merely circulating practice guidelines to health professionals has only a small impact* – guidelines featuring implementation supports are more likely to be used in practice

CES contracted by the Department of Health to provide training and resources in IS for National Clinical Guidelines

We aimed to support the effective implementation through:

- 2-day introductory training programme
- 3 workshops to ‘deep-dive’ on specific implementation topics
- An Implementation Guide and Toolkit, including bespoke tools/resources underpinned by IS frameworks
- Bespoke implementation workshops





# Example: Study of Implementation Teams

Organizing the Workforce to Improve Child Well-being: A Qualitative Study of Implementation Teams

## Primary Research Question

*Why and how are implementation teams used to support implementation processes and outcomes in child, family and youth service systems Frameworks*

## Frameworks

- Rationale for Teams/Outcomes – Conceptual Model for Implementation Research
- Team Functions – Active Implementation Frameworks
- Determinants of Team Performance – Consolidated Framework for Implementation Research

# Exploring Selected Frameworks

# The Quality Implementation Framework

- The Quality Implementation Framework: A Synthesis of Critical Steps in the Implementation Process
- Meyers et al. Am J Community Psychol (2012) 50:462–480

## What is it useful for?

- Understanding and guiding the steps involved in the implementation process.
- This framework was developed by synthesizing 25 implementation frameworks to identify critical steps for high-quality implementation. It focuses on specific actions (i.e. the “how to” of implementation).

## Where has it been used?

- Originates from psychology
- E.g. [i-THRIVE](#) is a national programme being implemented in over 70 locations in England to improve services for children and young people’s mental health. They draw on the QIF to support implementation.

# QIF Phases and Steps

## Phase 1: Host Setting

### Assessment strategies

Steps 1-3. Assessing needs and resources; Assessing fit; Assessing capacity/readiness.

### Decisions about adaptation

4. Possibility for adaptation

### Capacity-building strategies

5. Obtaining explicit buy-in from critical stakeholders and fostering a supportive community/organizational climate
6. Building general/organizational capacity
7. Staff recruitment/maintenance
8. Effective pre-innovation staff training

## Phase Two: Implementation Structure

### Structural features for implementation

9. Creating implementation teams
10. Developing an implementation plan

## Phase Three: Ongoing structure

### Ongoing implementation support strategies

11. Technical assistance/coaching/supervision
12. Process evaluation
13. Supportive feedback mechanism

## Phase Four: Improving

14. Learning from experience

# Consolidated Framework for Implementation Research

- Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science.
- Damschroder et al. *Implementation Science* 2009, 4:50

## What is it useful for?

- Understanding and explaining a broad range of potential barriers and enablers to implementation.
- This framework combines common elements and terminology from multiple implementation theories. It emphasizes the importance of adapting interventions to fit the setting, and continuous improvement throughout implementation.

## Where has it been used?

- Originated from health services
- E.g. CFIR was used to help identify drivers of implementation performance in a HPV vaccine delivery project in Mozambique ([Soi et al., 2018](#)).

Structure for approaching complex, interacting, multi-level, and transient states of constructs in the real world by...



Embracing, consolidating, and unifying key constructs from published implementation theories.



It can be used to guide formative evaluations and build the implementation knowledge base across multiple studies and settings.

# CFIR Domains

- **Characteristics of the intervention** include the evidence supporting the intervention, trialability, source and more.
- **Outer setting** includes the economic, political, and social context within which an organization resides
- **Inner setting** includes features of structural, political, and cultural contexts through which the implementation process will proceed
- **Characteristics of the Individuals involved** concern those who will directly and indirectly support implementation.
- **Implementation process.** Successful implementation usually requires an active change process aimed to achieve individual and organizational level use of the intervention as designed.

# Interactive Systems Framework

- Bridging the Gap Between Prevention Research and Practice: The Interactive Systems Framework for Dissemination and Implementation.
- Wandersman et al. Am J Community Psychol (2008) 41:171–181

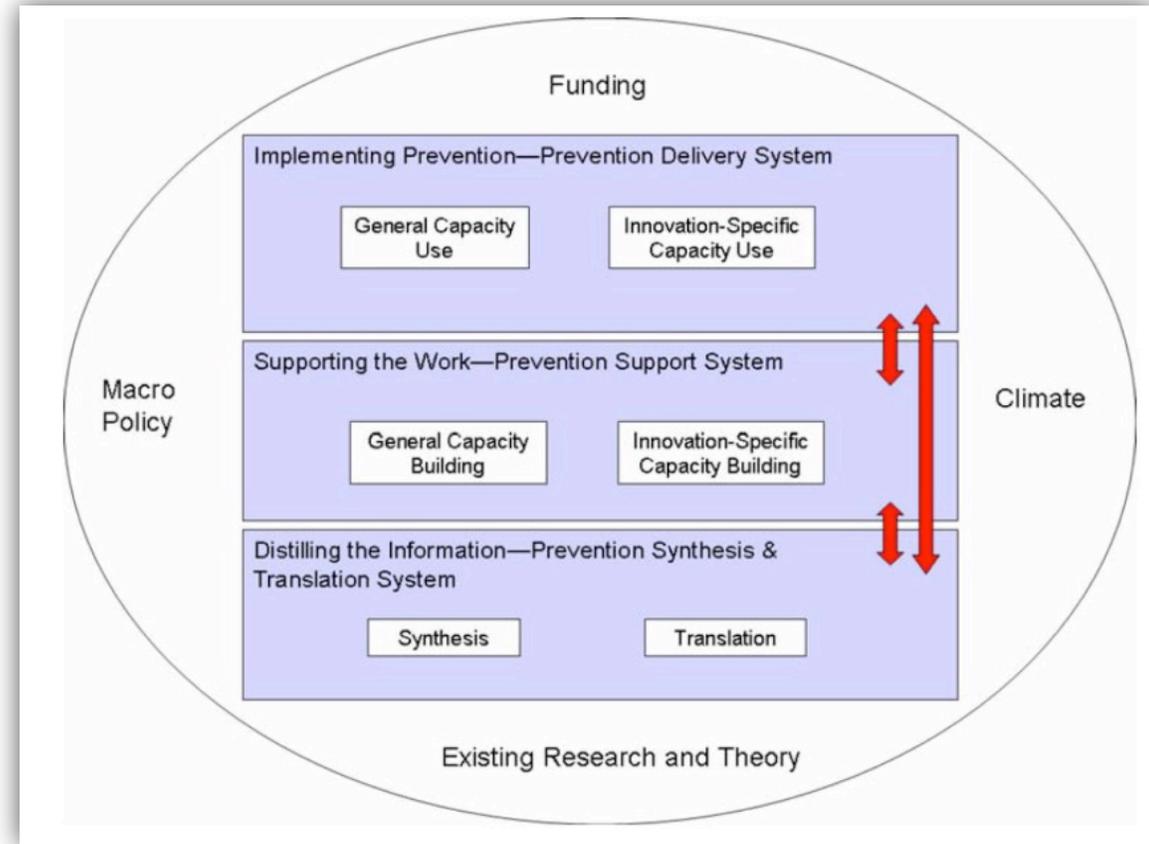
## What is it useful for?

- Implementation of prevention programs policies, and processes and principles.
- Focuses on three systems that influence the uptake and use of evidence.

## Where has it been used?

- Public health and violence prevention efforts

- **Prevention Synthesis and Translation System** works to distill information generated through research and to prepare it for dissemination and implementation in the field.
- **Prevention Support System** has two primary functions: innovation-specific support (innovation specific capacity-building) and general support (general capacity-building)
- **Prevention Delivery System** carries out the activities necessary to implement innovations.



# Prevention Delivery System

## Innovation-specific capacity-building:

- Related to using a specific innovation.
- Can include providing information about an innovation before an organization decides if it wants to adopt, providing training in how to carry out an innovation before it implements, and providing technical assistance once the innovation is in use.
- Provided in a number of ways, including training, technical assistance, and coaching.

## General capacity-building:

- Intended to enhance the infrastructure, skills, and motivation of an organization, but it does not focus on a specific innovation.
- The individuals, organizations, and communities that carry out prevention delivery activities have varying levels of existing capacity (defined here as including both ability and motivation) to implement prevention

# Exploration, Planning, Implementation and Sustainment

- Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors
- Gregory A. Aarons • Michael Hurlburt • Sarah McCue Horwitz. *Adm Policy Ment Health* (2011) 38:4–23

## What is it useful for?

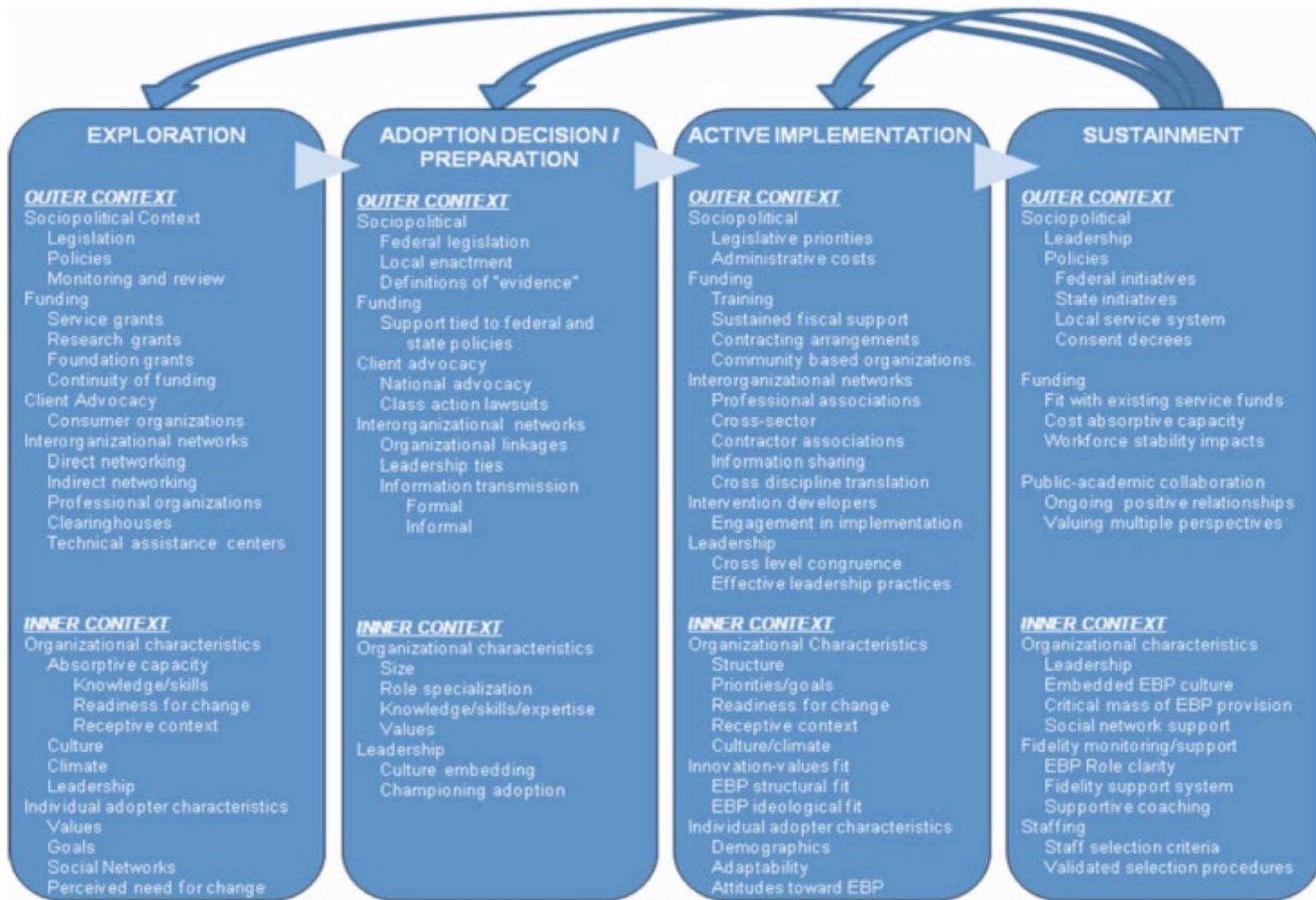
- Highlights key phases that guide and describe the implementation process. Identify factors across level of implementation (system and organization) that influence implementation.

## Where has it been used?

- Public health, child welfare, education, substance abuse treatment
- E.g. Used to examine the organizational and provider factors that affected the sustainment of evidence-based interventions across 11 public-sector service settings in the US across 2 states (Aarons et al., 2014)

Useful site: <https://episframework.com/>

# Exploration, Planning, Implementation and Sustainment



**Fig. 2** Conceptual model of implementation phases and factors affecting implementation in public service sectors

# Active Implementation Frameworks

- Active Implementation Frameworks for Programme Success: How to Use Implementation Science to Improve Outcomes for Children ([Metz & Bartley, 2012](#))

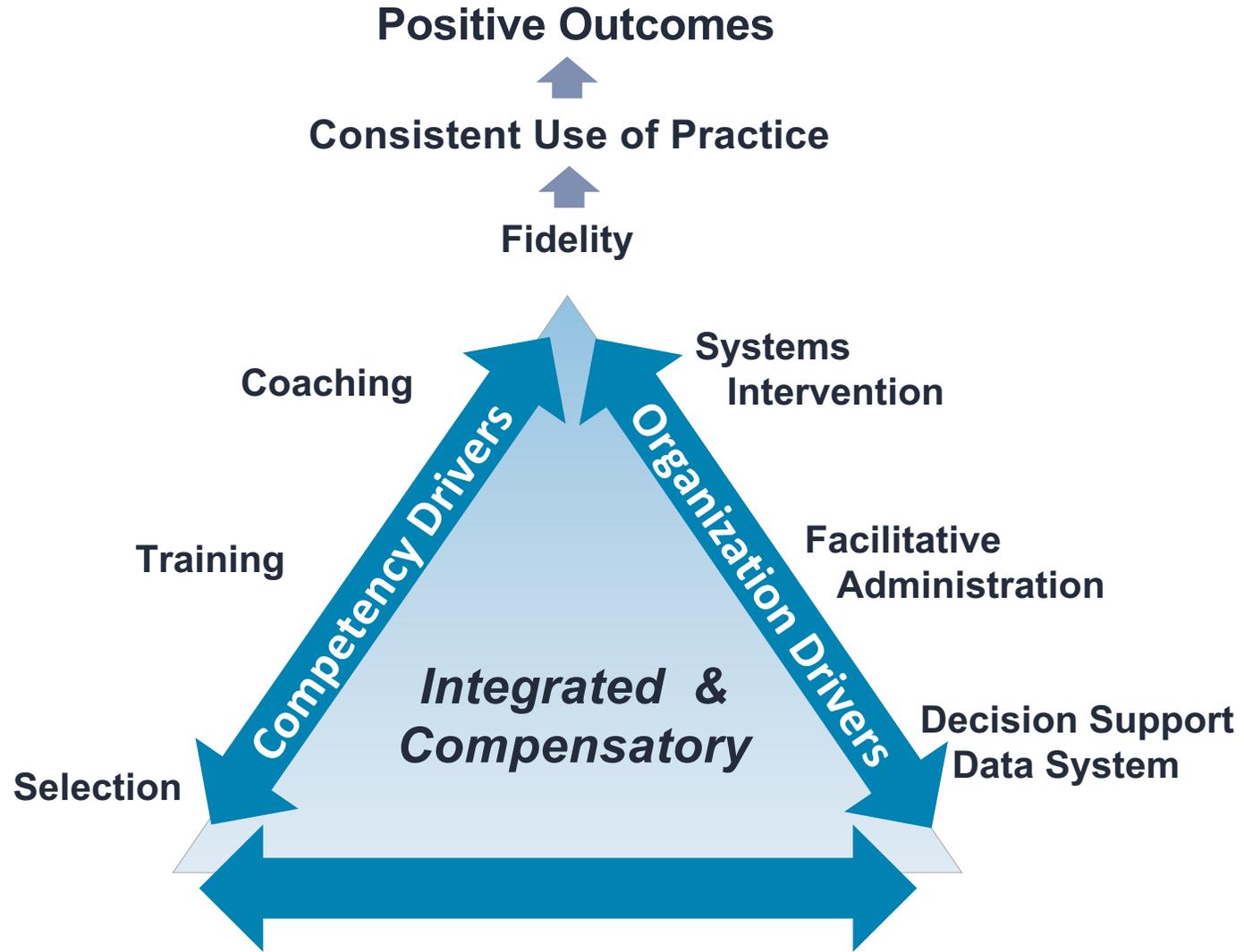
## What is it useful for?

- Implementation activities appropriate to each stage, understanding implementation barriers or enablers, and creating implementation teams.
- Developed by the National Implementation Research Network (NIRN) in the USA, this implementation framework is based on a 2005 synthesis of the implementation literature.

## Where has it been used?

- AIF was used in Catawba County, U.S. to facilitate implementation of evidence-based and evidence-informed practices to improve the wellbeing of children leaving care ([Metz et al., 2013](#)).

# Active Implementation Frameworks



# Implementation Outcomes

- Implementation Research in Mental Health Services: an Emerging Science with Conceptual, Methodological, and Training challenges.
- Proctor et al. Adm Policy Mental Health (2009) 36:24–34

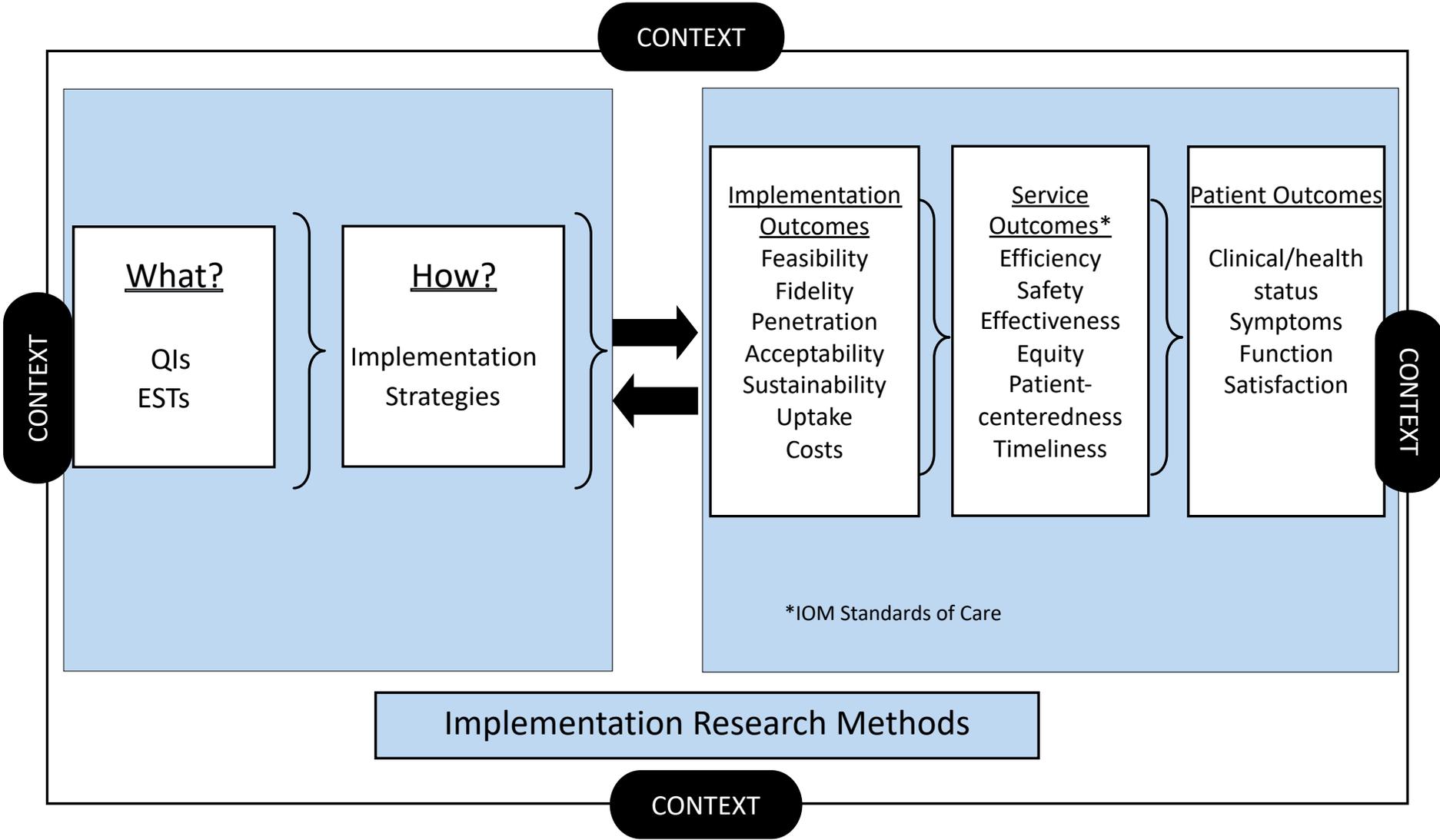
## What is it useful for?

- Exploring / evaluating the outcomes of implementation endeavors
- The framework proposes eight conceptually distinct implementation outcomes

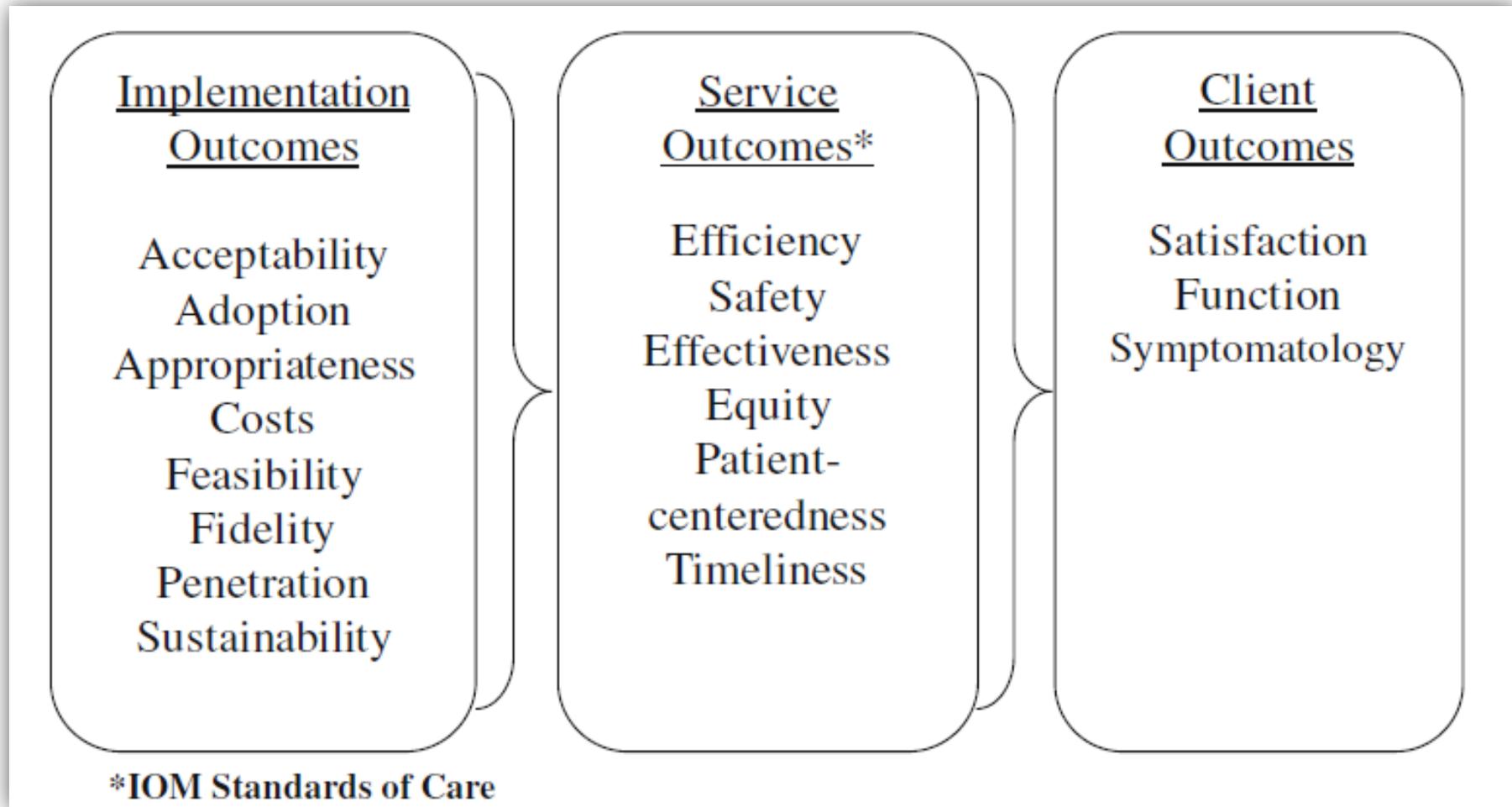
## Where has it been used?

- Primarily used in health but more recently in child welfare, parenting and family services, youth, education
- E.g. Used in a research study on the implementation of cognitive-behavioral therapy by community clinicians ([Edmunds et al., 2014](#))

# Conceptual Model for Implementation Research



# Conceptual Model for Implementation Research



# Reflection and Discussion



1. Comments or questions?
2. Are there other frameworks you have used?

# Critically Appraising and Selecting Frameworks

# Reflection and Discussion



1. What criteria do/might you consider when looking for and appraising frameworks?
2. Reflect individually, then share with your neighbors

# Theory, Model, and Framework Comparison and Selection Tool

- T-CaST: an implementation theory comparison and selection tool.
- Birken et al. Implementation Science (2018) 13:143

## Usability

- Is it easy to understand, apply and operationalize?

## Validity

- Has it been supported with empirical data?

## Applicability

- Does it address a relevant aspect of implementation / analytic level (e.g. individual; organizational; community)?

## Acceptability

- Is it accepted by / familiar to key stakeholders?

## Dissemination & Implementation Models in Health Research & Practice

### Need Help?

[Tutorial](#)[FAQ](#)[Glossary](#)[Contact Us](#)[Home](#)[Resources](#)[Submit Models](#)[About Us](#)[View All D&I Models](#)[Search D&I Models](#)[Select](#)[Adapt](#)[Integrate](#)[Measure constructs](#)

### View All D&I Models

The list of all D&I Models and their characteristics. You can compare up to five models by selecting the check box next to the model name. Additional information on each model can be found by clicking on the Description link under each Model name.

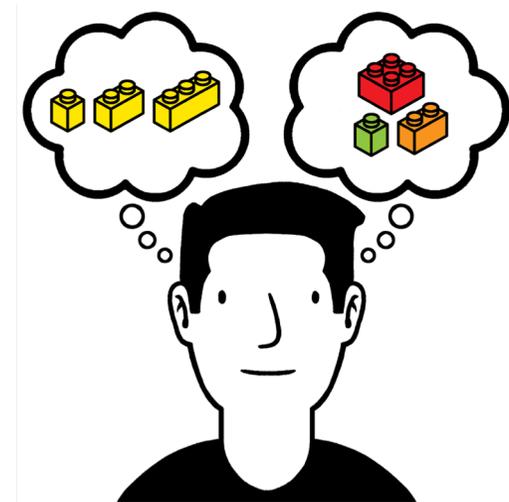
[Compare Models](#)

|                          | Sort  | Sort     | Sort                  |                         |              |           |        |        | Sort                    | Sort          |        |
|--------------------------|---|----------|-----------------------|-------------------------|--------------|-----------|--------|--------|-------------------------|---------------|--------|
|                          | Model   | D &/or I | Construct Flexibility | Socio-Ecological Levels |              |           |        |        | Field of Origin         | # Times Cited | Rating |
|                          |   |          |                       | Individual              | Organization | Community | System | Policy |                         |               |        |
| <input type="checkbox"/> | "4E" Framework for Knowledge Dissemination and Utilization<br><a href="#">Description</a> | D=I      | 3                     | I                       | O            | C         |        |        | Aging and mental health | 35            |        |

# Choosing Implementation Constructs

## Examples of constructs:

- Acceptability
- Implementer characteristics
- Complexity
- Context
- Cost
- Fidelity
- Barriers and facilitators
- Adaptation
- Adoption
- Fit
- Process
- Reach
- Strategies



# Reflection and Discussion



Pick an implementation project you are working on and using the handout:

1. Describe the aims of the project, the purpose of a framework, and implementation constructs of interest
2. Pick two potential frameworks and explore usability, validity, applicability and acceptability using the prompts provided
3. Document any decision you have made about framework use and a rationale for the decision(s)

Note: you may decide you need to use more than one framework.

# Conclusion

# Reflection and Discussion



Final Questions or Observations?

# Useful Links

- **The National Implementation Research Network's Active Implementation Hub**  
<https://implementation.fpg.unc.edu/>
- **Centre for Effective Services (CES) Guide to Implementation**  
<http://implementation.effectiveservices.org/>
- **The Center for Research in Implementation Science and Prevention (CRISP) – interactive website on dissemination and implementation models in health research and practice**
- <http://dissemination-implementation.org/>
- **Society for Implementation Research Collaboration**  
<https://societyforimplementationresearchcollaboration.org/>
- **European Implementation Collaborative website**  
<http://www.implementation.eu/>
- **Series of YouTube videos by Melanie Barwick**  
<https://www.youtube.com/user/MelanieBarwick/>
- **University of Washington – Theories, Models, & Frameworks** <https://impsciuw.org/research/frameworks/>
- **National Cancer Institute Division of Cancer Control & Population Science – Implementation Science at a Glance Toolkit**  
<https://www.thecommunityguide.org/resources/implementation-science-glance>

# Overview of Frameworks

- Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science*, 10(1), 53.
- Tabak, R. G., Khoong, E. C., Chambers, D. A., & Brownson, R. C. (2012). Bridging research and practice: models for dissemination and implementation research. *American Journal of Prevention Medicine*, 43(3), 337-350.
- Birken, S.A., Rohweder, C.L., Powell, B.J., Shea, C.M., Scott, J., Leeman, J.,...Presseau, J. (2018). T-CaST: an implementation theory comparison and selection tool. *Implementation Science*, 13. Retrieved from: <https://implementationscience.biomedcentral.com/articles/10.1186/s13012-018-0836-4>
- **The Dynamic Sustainability Framework**
- Chambers, d., A., Glasgow, R. E., & Strange, K. C. (2013). The Dynamic Sustainability Framework: addressing the paradox of sustainment amid ongoing change. *Implementation Science*, 8(117), 1-11.
- **The Consolidated Framework for Implementation Research (CFIR)**
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50.
- Website: <http://www.cfirguide.org/>
- **Taxonomy of implementation outcomes**
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- **Active Implementation Frameworks**
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- Website: <http://implementation.fpg.unc.edu/>
- **The Behaviour Change Wheel**
- Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation Science*, 6(1), 42.
- Website: <http://www.behaviourchangewheel.com/>
- **Normalisation Process Theory**
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- Website: <http://www.normalizationprocess.org/>
- **The Promoting Action on Research Implementation (PARIHS) Framework**
- Rycroft-Malone, J. (2004). The PARIHS Framework – a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care Quality*, 19(4), 297-304.
- Website: <http://www.nccmt.ca/resources/search/85>
- **The Quality Implementation Framework (QIF)**
- Meyers, D., Durlak, J. A., & Wandersman, A. (2012). The Quality Implementation Framework: a synthesis of critical steps in the implementation process. *American Journal of Community Psychology*, 50(3-4): 462-480.

# Other Key Articles and Books

- Brownson, R. C., Colditz, G. A., & Proctor, E. K. (Eds.). (2010). *Dissemination and Implementation Research in Health: Translating Science to Practice*. New York: Oxford University Press.
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic review and recommendations. *Milbank Quarterly*, 82, 581-629.
- Powell, B. J., McMillen, J. C., Proctor, E. K., Carpenter, C. R., Griffey, R. T., Bunger, A. C., Glass, J. E., & York, J. L. (2011). A compilation of strategies for implementing clinical innovations in health and mental health. *Medical Care Research and Review*, 69, 123-15.

# Evidence Resources

- Evidence database by McMaster University with free access to evidence to support policy makers, stakeholders and researchers interested in how to strengthen or reform health systems or in how to get cost-effective programs, services and drugs to those who need them. <https://www.socialsystemsevidence.org/>
- Evidence database by McMaster University with free access to evidence about strengthening government sectors and program areas: citizenship, children and youth services, community and social services, consumer protection, culture and gender, economic development and growth, education, employment, food safety and security, government services, housing, infrastructure, public safety and justice, recreation, and transportation. <https://www.cochranelibrary.com/>
- Cochrane's library of reviews of educational, behavioural, financial, regulatory and organisational interventions designed to improve health professional practice and the organisation of health care services. <https://campbellcollaboration.org/library.html> .
- Systematic reviews of social and economic interventions in crime and justice, education, international development and social welfare. It is published by the Campbell Collaboration, an international research network. <https://eric.ed.gov/>
- The Education Resources Information Center (ERIC) website by the Institute of Education Sciences at the U.S. Department of Education provides access to education resources including journal articles, reports, conference papers and other selected materials. <https://www.cebc4cw.org/>
- The California Evidence-Based Clearinghouse for Child Welfare's mission is to advance the effective implementation of evidence-based practices for children and families with the child welfare system. <https://www.samhsa.gov/ebp-resource-center>
- The Substance Abuse and Mental Health Service Administration's Evidence-Based Practices Resource Center provides information and tools to incorporate evidence-based practices into their communities or clinical settings. <https://www.healthsystemsevidence.org/>