

# Methods for Reporting and Aligning Implementation Strategies with Implementation Outcomes

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**COPRH Con**

Colorado Pragmatic  
Research in Health  
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# Conflicts of Interest

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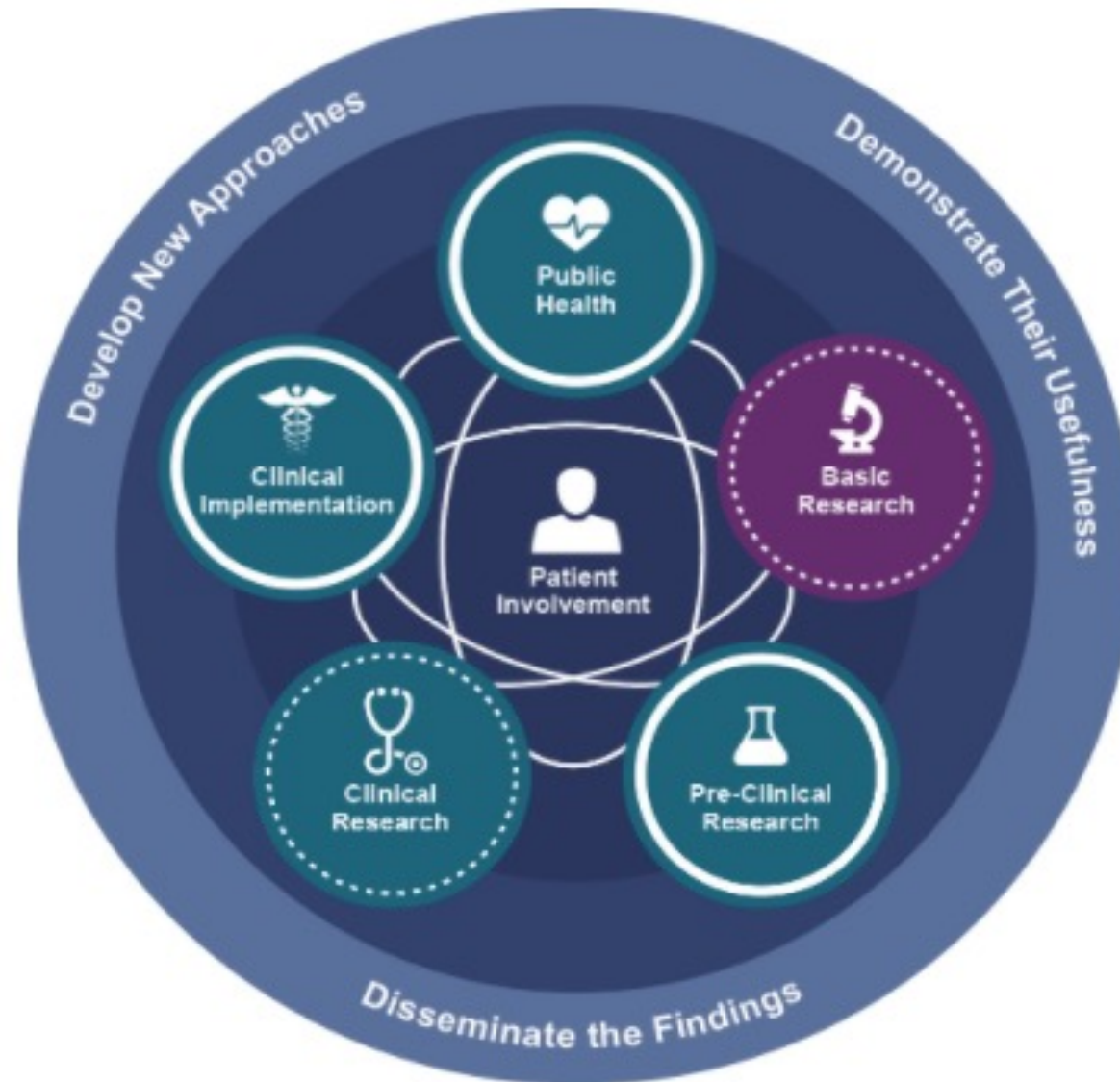
None to disclose

# Agenda

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1. Discuss the importance of specifying implementation strategies in clinical and implementation research.
2. Describe and discuss methods for tracking implementation strategy use.
3. Describe a tool to support reporting implementation strategies in clinical and implementation research.

# National Center for Advancing Translational Science Model for Translational Science





# Replication

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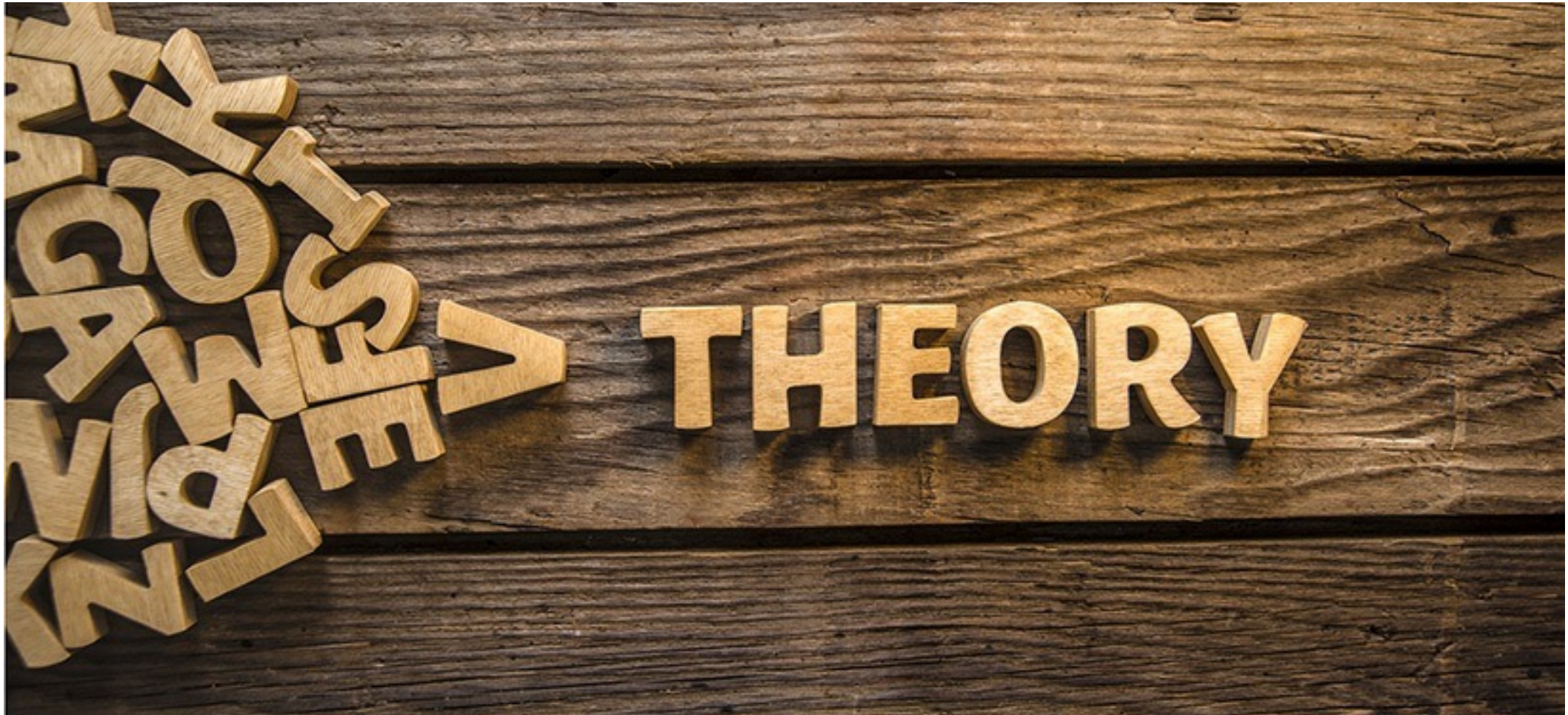


Credit: Caltech



# Improve Theory

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# Facilitating Research-to-Practice Implementation



**We only provide 64%  
of the information needed to implement the intervention**  
Premachandra & Lewis (2020) *Perspectives on Psychological Science*



# Designing for Dissemination and Implementation and Sustainment in Mind

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# Accelerating Translational Science

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# The way forward?

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# Agenda

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1. Discuss the importance of specifying implementation strategies in clinical and implementation research.
2. Describe methods for tracking implementation strategy use
3. Describe a tool to support reporting implementation strategies in clinical and implementation research.

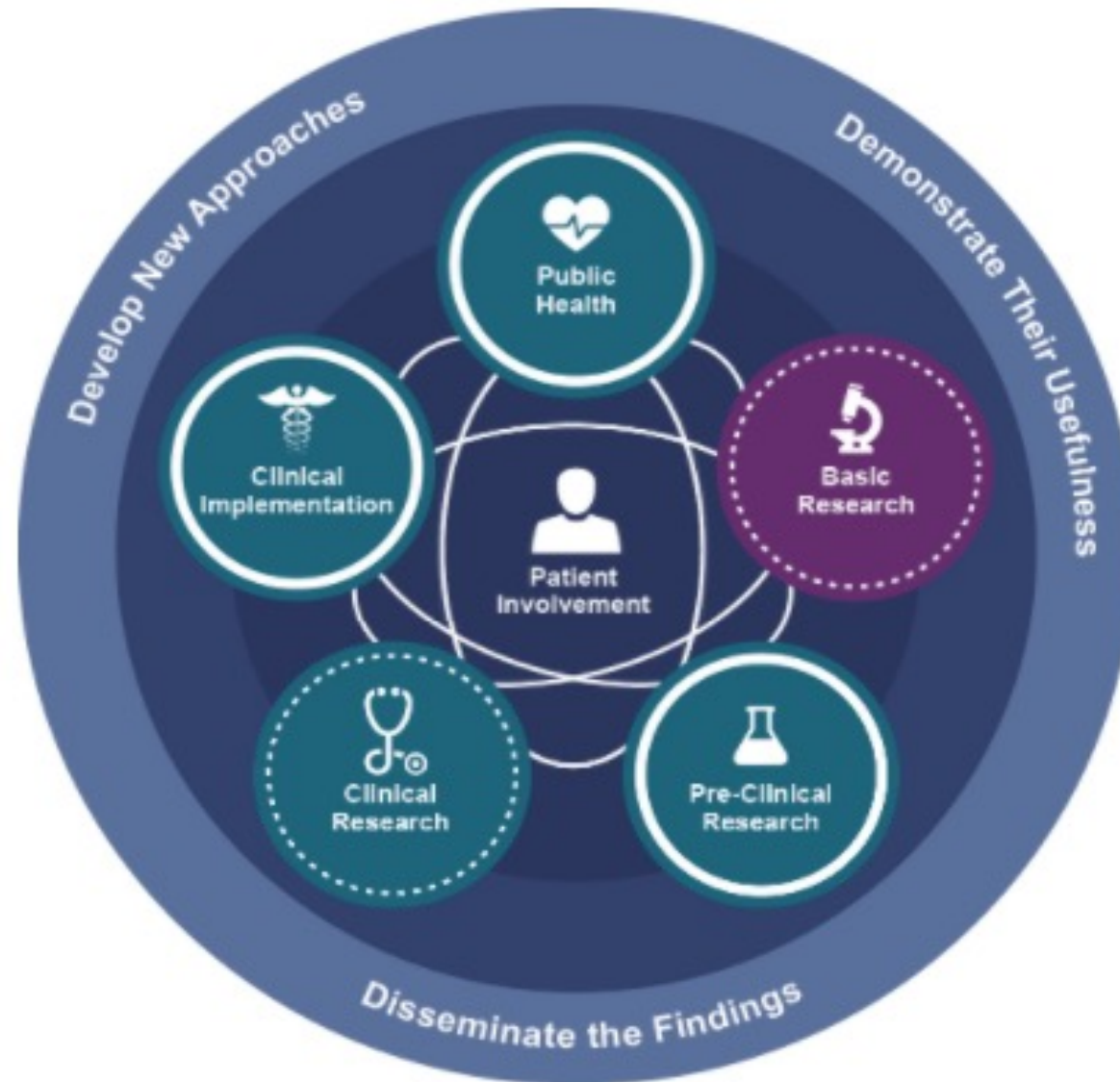


# Poll – What kind of work do you do?

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# Tracking Implementation Strategies

# National Center for Advancing Translational Science Model for Translational Science



# Surveying the Implementers

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Did you use X strategy  
to promote Y evidence-  
based practice?





# Activity Logs

## Implementation Activity Log

Event/Activity	Date	Time	Purpose	Attendees
<i>Example: Training</i>	<i>1/1/2015</i>	<i>3pm – 5pm</i>	<i>Train Intake workers on new screening process and gain support for project</i>	<i>Intake workers and project director (*in addition to job title, please include attendees first &amp; last names*)</i>

# Recording Implementation Meetings

## Coding Scheme for Tracking Implementation Strategies

Code	Explanation	Example
Attendees	Members present at meeting	
IT#		
Date	Date of meeting	
Actor	Team member who enacted the strategy, indicate the implementation team position of the actor (i.e. secretary, communication specialist, chair) as well as his/her name	Involvement by all team members
Discreet Implementation Strategy Category		Educate
Discreet Implementation Strategy Code		Conduct Educational Meeting
Data Request	Respond with "yes" or "no". Only endorse this category if the implementation activity specifically has to do with a request to change the format or content of the penetration data received by the team.	N
Planned	Respond with "yes" or "no". An implementation strategy is "planned" if the implementation team discusses intention to use the strategy but have not yet enacted it.	Y
Enacted	Respond with "yes" or "no". An implementation strategy is "enacted" if the team has already completed the strategy.	N/A



Boyd et al., (2018) *Behavior Therapy*

# Summary of Methods to Track Implementation Strategy Use

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- Surveying relevant stakeholders at the end of an implementation effort
- Monitoring activities via short survey throughout the implementation effort
- Audio recording meetings throughout the implementation effort

# Let's Discuss!

## How have you tracked implementation strategy use?





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Enhancing the Quality and  
Transparency



## Standards for Reporting Implementation Studies: the StaRI checklist for completion

The StaRI standard should be referenced as: Pinnock H, Barwick M, Carpenter C, Eldridge S, Grandes G, Griffiths CJ, Rycroft-Malone J, Meissner P, Murray E, Patel A, Sheikh A, Taylor SJC for the StaRI Group. Standards for Reporting Implementation Studies [\(StaRI\) statement](#). *BMJ* 2017;356:i6795

The detailed Explanation and Elaboration document, which provides the rationale and exemplar text for all these items is: Pinnock H, Barwick M, Carpenter C, Eldridge S, Grandes G, Griffiths C, Rycroft-Malone J, Meissner P, Murray E, Patel A, Sheikh A, Taylor S, for the StaRI group. Standards for Reporting Implementation Studies [\(StaRI\). Explanation and Elaboration document](#). *BMJ Open* 2017;7:e013318

Notes: A key concept of the StaRI standards is the dual strands of describing, on the one hand, the implementation strategy and, on the other, the clinical, healthcare, or public health intervention that is being implemented. These strands are represented as two columns in the checklist.

The evidence about the impact of the intervention on the targeted population should always be considered (column 2) and either health outcomes reported or robust evidence cited to support a known beneficial effect of the intervention on the health of individuals or populations.

The StaRI standards refers to the broad range of study designs employed in implementation science. Conversely, whilst all items are worthy of consideration, not all items will be applicable to, or feasible within every study.

Checklist item		Reported on page #	Implementation Strategy	Reported on page #	Intervention
Title and abstract			"Implementation strategy" refers to how the intervention was implemented		"Intervention" refers to the healthcare or public health intervention that is being implemented.
Title		1	Identification as an implementation study, and description of the methodology in the title and/or keywords		Identification as an implementation study, including a description of the implementation strategy to be tested, the evidence-based intervention being implemented, and defining the key implementation and health outcomes.
Abstract		2			





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# Enhancing the QI and



## Standards for Reporting Implementation Research

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BMJ 2017;356:i6795

The detailed Explanation and Elaboration  
Barwick M, Carpenter C, Eldridge S, Grant  
group. Standards for Reporting Implementation Research

Notes: A key concept of the StaRI standard is  
the public health intervention that is being  
evaluated. The primary focus of implementation research  
(column 1) and the expectation of the  
evaluation (column 2).

The StaRI standards refers to  
reporting specific methodological

Checklist item	Reported on page No
----------------	---------------------

### Title and abstract

Title	1	
Abstract	2	

Introduction  
Background and objectives

Methods  
Trial design

Participants

Interventions

Outcomes

Sample size

Randomisation:  
Sequence generation

Allocation concealment  
mechanism  
Implementation

Blinding

Identification  
based on

## CONSORT 2010 checklist of information to include when reporting a randomised trial\*

Section/Topic

Item No

Checklist item

Reported on page No

- 1a Identification as a randomised trial in the title  
1b Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts)
- 2a Scientific background and explanation of rationale  
2b Specific objectives or hypotheses


- 3a Description of trial design (such as parallel, factorial) including allocation ratio  
3b Important changes to methods after trial commencement (such as eligibility criteria), with reasons  
4a Eligibility criteria for participants  
4b Settings and locations where the data were collected  
5 The interventions for each group with sufficient details to allow replication, including how and when they were actually administered  
6a Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed  
6b Any changes to trial outcomes after the trial commenced, with reasons  
7a How sample size was determined  
7b When applicable, explanation of any interim analyses and stopping guidelines

- 8a Method used to generate the random allocation sequence  
8b Type of randomisation; details of any restriction (such as sequentially numbered containers),  
9 Mechanism used to implement the random allocation sequence (such as describing any steps taken to conceal the sequence until interventions were assigned)
- 10 Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions  
11a If done, who was blinded after assignment to interventions (for example, participants, care providers, those

# Pragmatic Implementation Reporting Tool

**Powell and colleagues: Expert Recommendations for Implementing Change**

**Proctor and colleagues: Name it, Define it, and Operationalize it**

Included in Study (No=0; Yes=1)	Name it: ERIC Implementation Strategy	Define it: ERIC Definition	Operationalize it								
			Action	Actor	Context	Dose	Action Target		Temporality	Implementation Outcome	Justification
							Conceptual	Unit of Analysis			
	Use evaluative and iterative strategies										
	Assess for readiness and identify barriers and facilitators	Assess various aspects of an organization to determine its degree of readiness to									
	Audit and provide feedback	Collect and summarize clinical performance data over a specified time period and give it to									
	Conduct cyclical small tests of change	Implement changes in a cyclical fashion using small tests of change before taking changes									
	Conduct local needs assessment	Collect and analyze data related to the need for the innovation.									
	Develop a formal implementation blueprint	Develop a formal implementation blueprint that includes all goals and strategies. The									
	Develop and implement tools for quality monitoring	Develop, test, and introduce into quality-monitoring systems the right input—the									
	Develop and organize quality monitoring systems	Develop and organize systems and procedures that monitor clinical processes and/or									
	Obtain and use patients'/consumers' and family feedback	Develop strategies to increase patient/consumer and family feedback on the implementation									
	Purposely reexamine the implementation	Monitor progress and adjust clinical practices and implementation strategies to									
	Stage implementation scale up	Phase implementation efforts by starting with small pilots or demonstration projects and									



# Pragmatic Implementation Reporting Tool

## Expert Recommendations for Implementing Change (ERIC)


Name it: ERIC Implementation Strategy	Define it: ERIC Definition
Use evaluative and iterative strategies	
Assess for readiness and identify barriers and facilitators	Assess various aspects of an organization to determine its degree of readiness to
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# Pragmatic Implementation Reporting Tool

**Powell and colleagues: Expert Recommendations for Implementing Change**

**Proctor and colleagues: Name it, Define it, and Operationalize it**

**Presseau and colleagues: Action, Actor, Context, Target, and Time**

Included in Study (No=0; Yes=1)	Name it: ERIC Implementation Strategy	Define it: ERIC Definition	Operationalize it								
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# Pragmatic Implementation Reporting Tool

Operationalize it								
Action	Actor	Context	Dose	Action Target		Temporality	Implementation Outcome	Justification
				Conceptual	Unit of Analysis			

Rudd, Davis, & Beidas, (2020) *Implementation Science*

JAMA Psychiatry | [Original Investigation](#)

# Effectiveness of Task-Shifted Trauma-Focused Cognitive Behavioral Therapy for Children Who Experienced Parental Death and Posttraumatic Stress in Kenya and Tanzania

## A Randomized Clinical Trial

Shannon Dorsey, PhD; Leah Lucid, MS; Prerna Martin, MPH; Kevin M. King, PhD; Karen O'Donnell, PhD; Laura K. Murray, PhD; Augustine I. Wasonga, MA; Dafrosa K. Itemba, MS; Judith A. Cohen, MD; Rachel Manongi, MD, PhD; Kathryn Whetten, PhD

**IMPORTANCE** Approximately 140 million children worldwide have experienced the death of one or both parents. These children, mostly in low- and middle-income countries, have higher rates of mental health problems than those who have not experienced parental death. Cognitive behavioral therapy (CBT) may improve the well-being of these children, but to our knowledge there have been no randomized clinical trials specifically focused on this population.

[← Editorial page 452](#)

[+ Supplemental content](#)

Type of ERIC Strategy	Used	Reported
Use evaluative and iterative strategies	4	0
Provide interactive assistance	1	1
Adapt and tailor to context	1	0
Develop stakeholder interrelationships	3	0
Train and educate stakeholders	8	4
Support clinicians	2	1
Engage consumers	0	0
Utilize financial strategies	0	0
Change infrastructure	1	0
<b>TOTAL</b>	<b>20</b>	<b>6</b>

Rudd, Davis, & Beidas, (2020) *Implementation Science*



# How to Use the Pragmatic Implementation Reporting Tool

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- Use at the beginning of a project
  - To support designing and grant writing
- Use throughout the project
  - To keep track of all the strategies used across time
- Use at end of project
  - Include as supplementary material when submitting
- Use in meta-analyses
  - To summarize literature

# Conclusion

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# Gratitude

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**Funder**

# Questions?

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