

# Implementation Science: What Is It and Why Should I Care?

---

*A. Rani Elwy, PhD and Eric Richardson, PhD  
VA Bedford and Boston Healthcare Systems  
EPIC QUERI Mini-Series  
June 3, 2024*

**VA**



U.S. Department  
of Veterans Affairs



VA Quality Enhancement Research Initiative  
EVIDENCE INTO PRACTICE

**EPIC QUERI**

VA Evidence, Policy, and Implementation Center

# Disclosures

The views expressed in this presentation are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the United States government.

# **OUR VISION: A Role for Everyone in Implementation Science**

# Let's Take a Poll!

How much implementation science knowledge do you have?

- **None**—I'm just learning about it now for the first time
- **A little**—I've heard about it before, but have never had any instruction or training
- **A moderate amount**—I've read about it, and know some concepts, but I've never applied it to my work
- **A great deal**—I have used implementation science in at least one project

# Using Implementation Science to Move Innovations into Practice in VA Health Care Settings

- Using Implementation Strategies and Fostering Buy-In
  - Dr. Alison Hamilton, June 10
- Evaluating Implementation Process and Outcomes
  - Dr. Allen Gifford, June 17
- Planning for Sustainment
  - Dr. Sara Landes, June 24

# U.S. Department of Veterans Affairs

Fulfilling President Lincoln's promise to care for those who have served in our nation's military and for their families, caregivers, and survivors.



On average, it takes 17 years for just 14% of original research to make its way to practice.

# We have an Implementation Problem, Not an Evidence Problem

Green L, et al, *Annu Rev Public Health*  
2009;30:151-74

VA



U.S. Department  
of Veterans Affairs

# Poll Number 2

**Please tell us what your role is in the VA:**

- Doctor or clinician
- Clinical leader
- Clinical staff
- VHA employee, not clinical
- VBA employee
- Researcher
- Other



# What Will You Get From This Course?

You are going to have a roadmap of how to implement any innovation in your workplace!

**No matter where you sit, SOMETHING needs improving. If you could, what would you improve?**

# Best Practices, Innovations, Evidence-Based Practices



[VA/DoD Clinical Practice Guidelines](#)



[Institute for Healthcare Improvement](#)



[SAMHSA Evidence-Based Practice Resource Center](#)



[Choosing Wisely](#)

# QUERI Implementation Roadmap



VA Quality Enhancement Research Initiative

EVIDENCE INTO PRACTICE

Kilbourne AM et al, Quality Enhancement Research Initiative Implementation Roadmap, Medical Care: October 2019 - Volume 57 - Issue - p S286-S293 doi: 10.1097/MLR.0000000000001144

VA



U.S. Department of Veterans Affairs

# Co-Morbid Depression and Diabetes in Rural Settings

Meet Rose (she/her). Rose is a nurse at the “East VA Medical Center” located in a rural part of the U.S.

Rose works specifically with Veterans who have both depression and diabetes, resulting in poor self-care behaviors and worse glycemic control

Rose comes up with a great plan to offer a blended diabetes/depression behavioral health coaching program in primary care, through twice a month 30-minute telephone sessions and three monthly, telephone 15-minute follow-up sessions over a 6-month period.

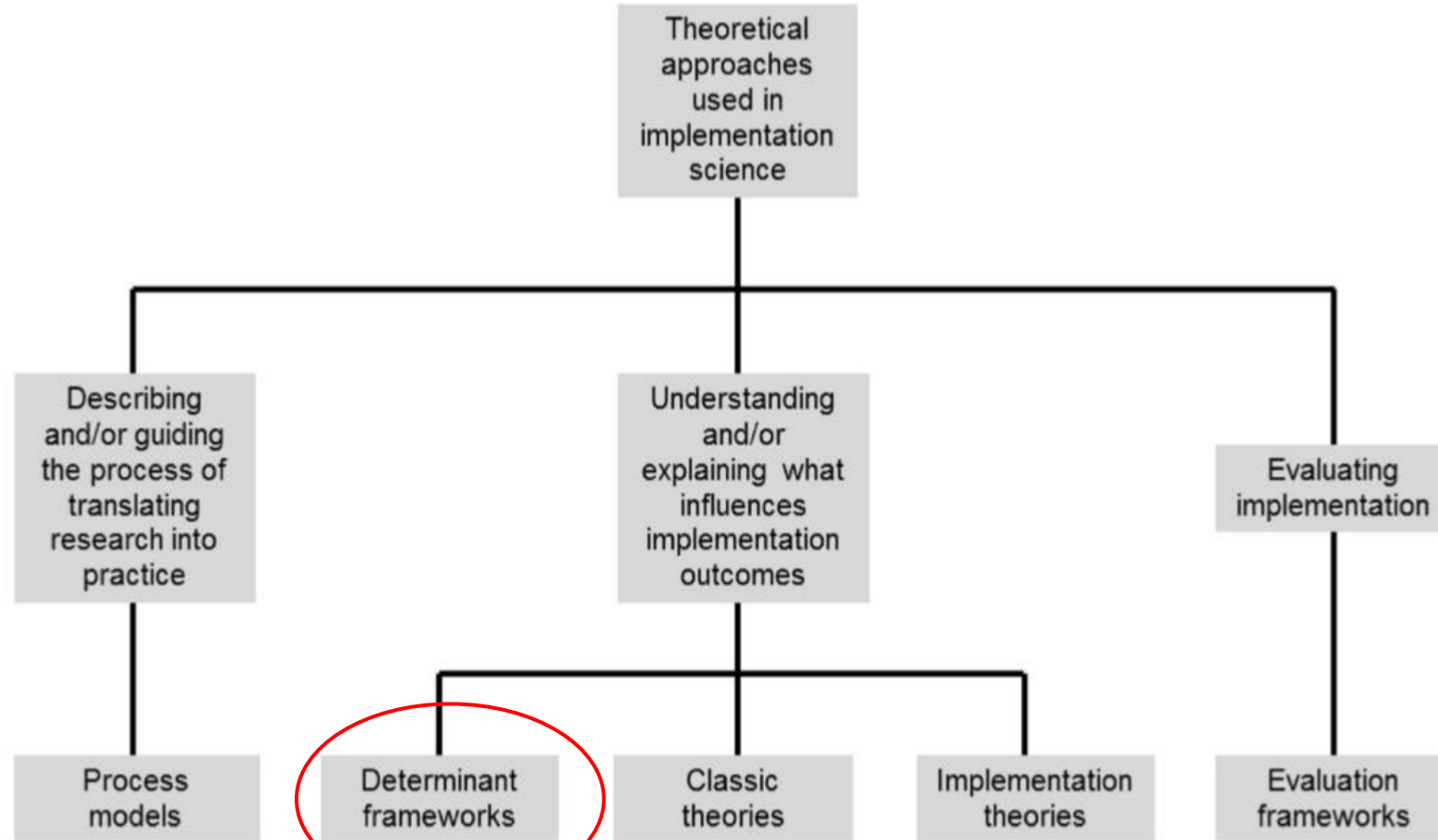


(based on [Cully et al, 2014](#))

# Pre-Implementation

- What is the problem Rose is trying to solve?
- Who are the relevant stakeholders and interested parties that Rose needs to connect with?
- Rose has a best practice in mind—what else does she need to think about?

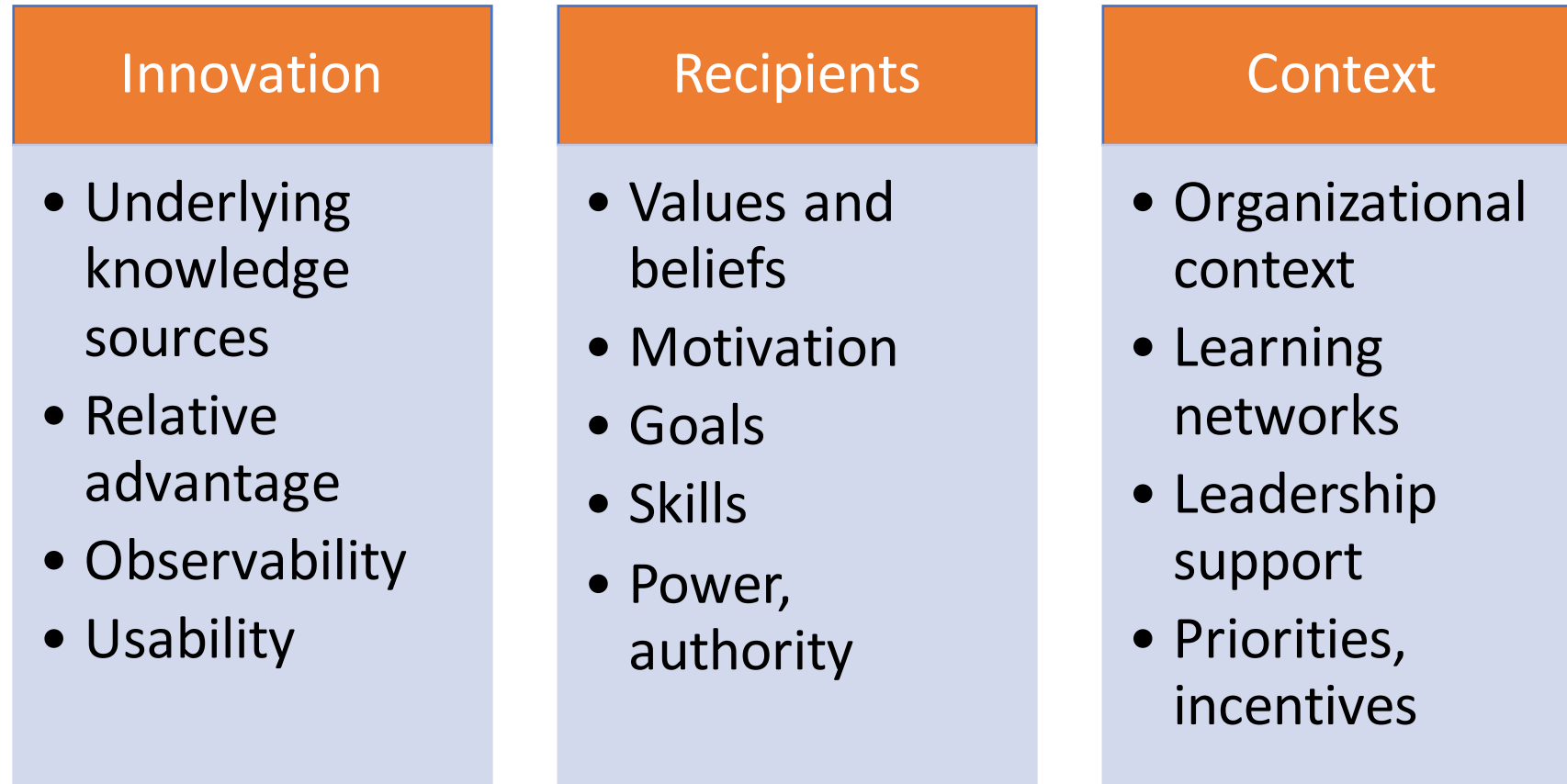
“Nothing is more practical  
than a good theory.”  
— **Kurt Lewin**



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

[Nilsen, P. \*Implementation Science\* \(2015\) 10:53](#)

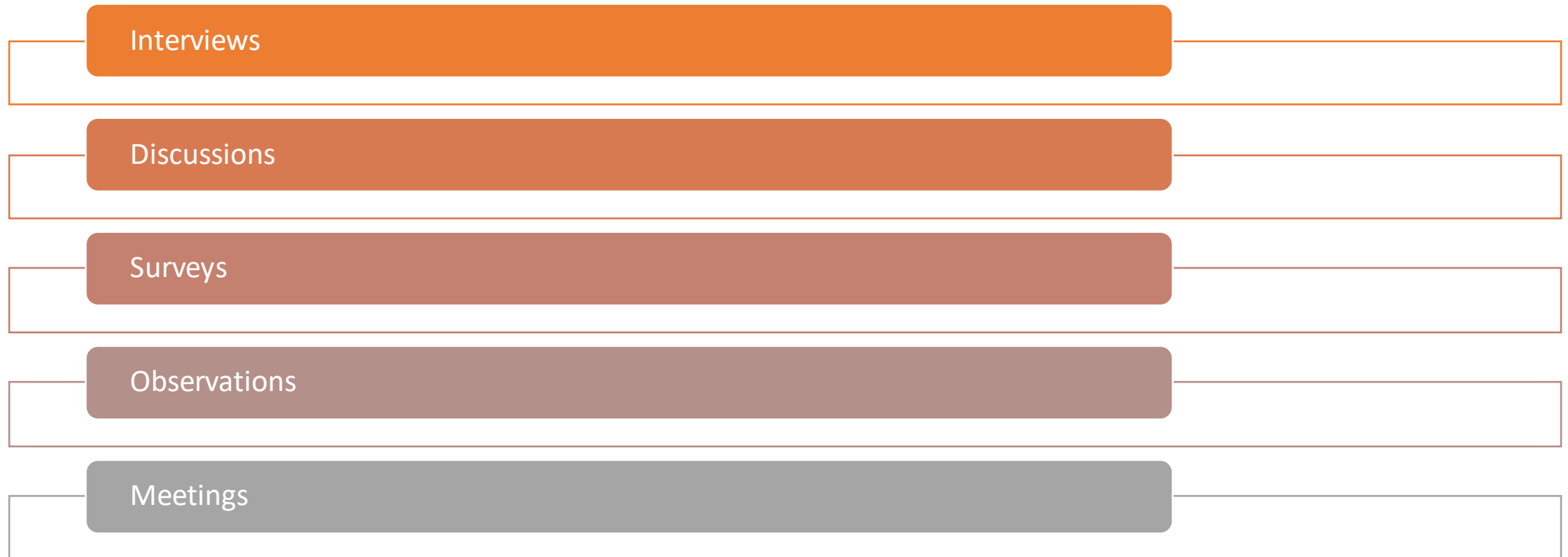
# Successful Implementation is a Product of:



[Harvey and Kitson, \*Implementation Science\*, 2016](#)



# Pre-Implementation Methods—Guided by TMF\*



\*Theory, Model, Framework



Jumbo leads 20 elephants and 17 camels across the Brooklyn Bridge 1884

VA



U.S. Department  
of Veterans Affairs

# Problem Rose is Trying to Solve

## Innovation

- Underlying knowledge sources
- Relative advantage
- Observability
- Usability



# Who are the Recipients and What do they Think?

| Recipients  |
|---|
| <ul style="list-style-type: none"><li>• Values and beliefs</li><li>• Motivation</li><li>• Goals</li><li>• Skills</li><li>• Power, authority</li></ul> |



# What is the Context and Why does that Matter?

**Context**

- Organizational context
- Learning networks
- Leadership support
- Priorities, incentives



# Co-Morbid Depression and Diabetes in Rural Settings

| Innovation  | Recipients  | Context  |
|---|---|--|
| <ul style="list-style-type: none"><li>• Underlying knowledge sources</li><li>• Relative advantage</li><li>• Observability</li><li>• Usability</li></ul> | <ul style="list-style-type: none"><li>• Values and beliefs</li><li>• Motivation</li><li>• Goals</li><li>• Skills</li><li>• Power, authority</li></ul> | <ul style="list-style-type: none"><li>• Organizational context</li><li>• Learning networks</li><li>• Leadership support</li><li>• Priorities, incentives</li></ul> |



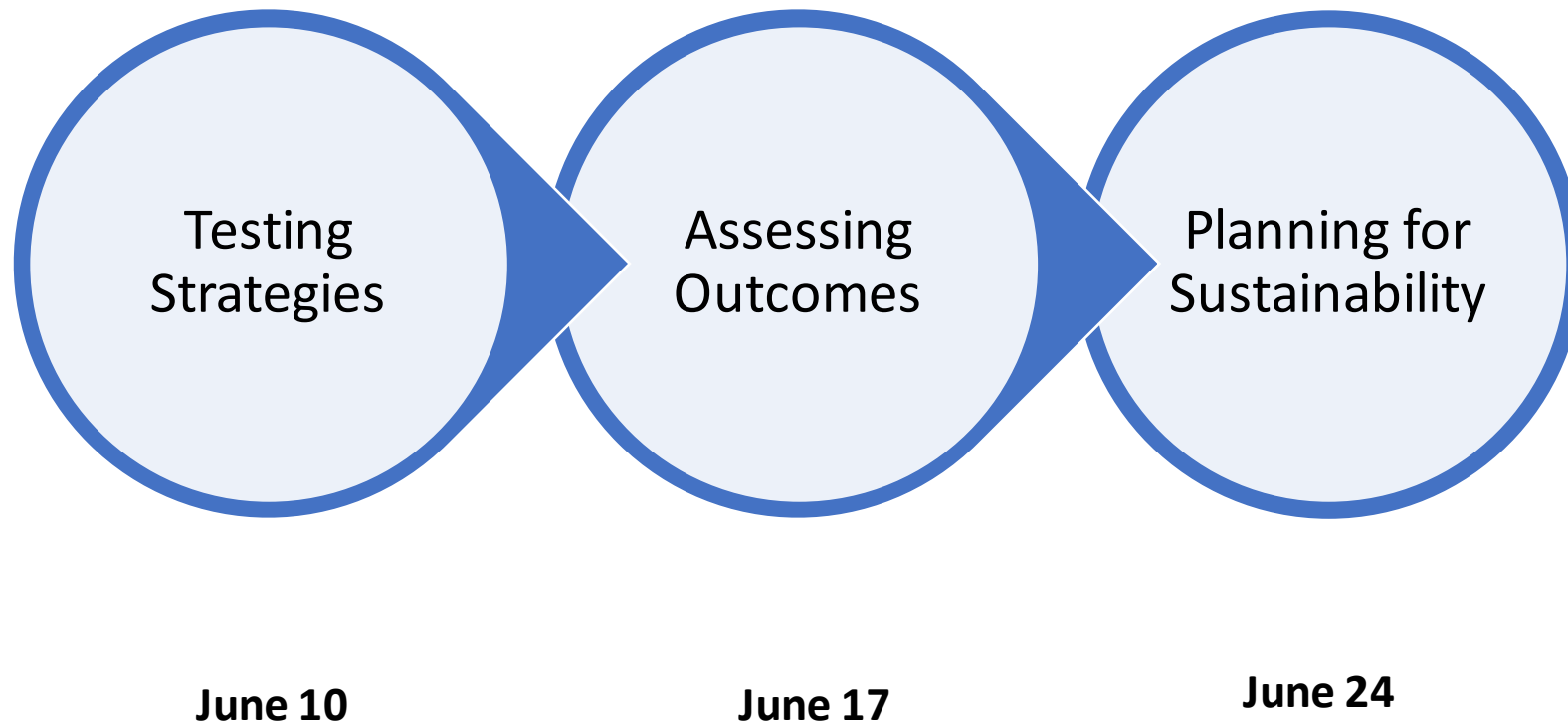
## Pre-Implementation Determinants

Q: What challenges related to health equity are potentially impacting the implementation of Rose's innovation?

# Rose's Next Steps



# What We Aim to Achieve in Implementation Science



## When defining implementation science, some very non-scientific language can be helpful...

- The intervention/practice/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**
- Main implementation outcomes are **HOW MUCH** and **HOW WELL** they **DO THE THING**

[Curran, G.M. Implementation science made too simple: a teaching tool. \*Implement Sci Commun\* 1, 27 \(2020\)](#)

# Nine categories of implementation strategies



Powell et al, 2012; 2015

VA



U.S. Department  
of Veterans Affairs

# Your Implementation Roadmap—Complete it During Each Session!

## Pre-Implementation

- Problem to solve
- Stakeholders to engage
- Best practices to use

## Implementation

- Implementation strategies to overcome challenges to uptake
- Outcomes to assess
- Adaptations to make

## Sustainment

- Ownership of the process
- Benefits to Veterans
- Tracking progress
- Impacts on Veterans, clinicians, system

# Thank you and Questions

[Rani.Elwy@va.gov](mailto:Rani.Elwy@va.gov)

[Eric.Richardson3@va.gov](mailto:Eric.Richardson3@va.gov)

