



# Quality Enhancement Research Initiative (QUERI): Implementation in the Era of VA Modernization

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**VA**



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Office of Research & Development



**VA HEALTH CARE** | Defining **EXCELLENCE**  
in the 21st Century

# *Poll Question*

Are you currently implementing a research or quality improvement project directly with local leadership (i.e., your facility or VISN director)?

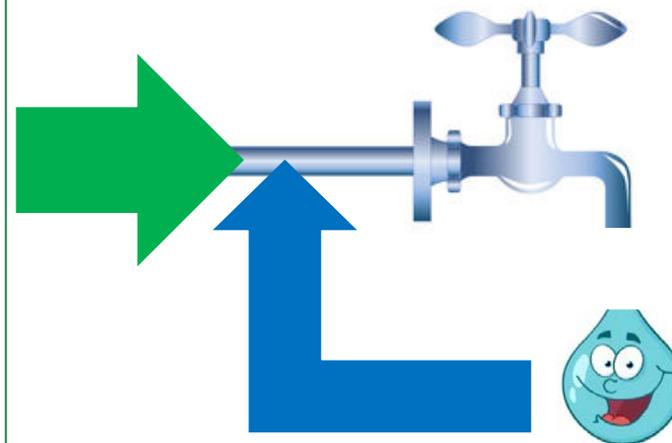
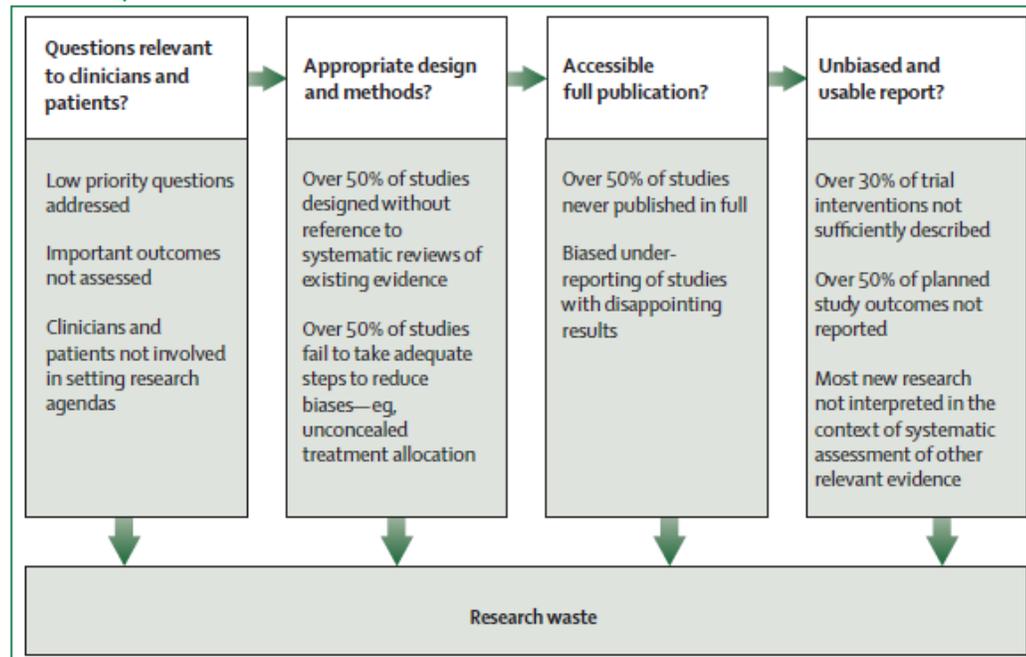
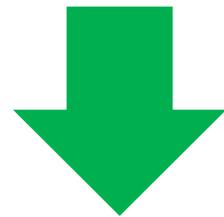
\_\_\_ Yes

\_\_\_ No

# Effective Practices are Not Routinely Implemented

80% of medical research dollars do not result in public health impact.

—Chalmers & Glasziou, *Lancet* 2009

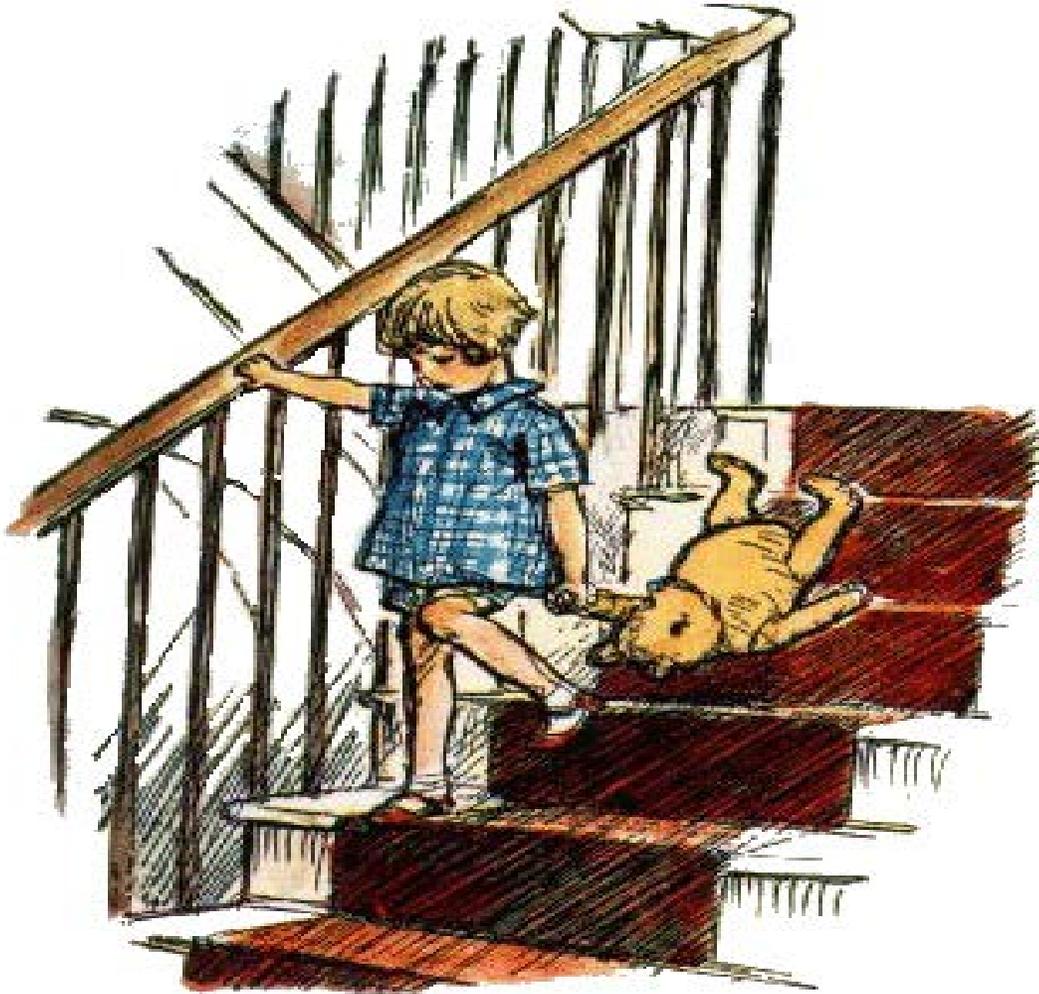


From Mark Bauer, MD,  
VA Boston HSR&D Center  
Harvard Medical School

# Research-to-Practice Gap

- New research takes **too long** to get adopted
- Research is often **not aligned** to address critical health/health care problems
- Large programs being rolled out to “scale up and spread” effective practices without **adequate planning** to maximize effectiveness and learning
- **Variation** and patient-centered care
  - Treatments work differently for different people
  - But inefficiency is a problem
- **Implementation strategies that ensure provider ownership, buy-in that address local needs**

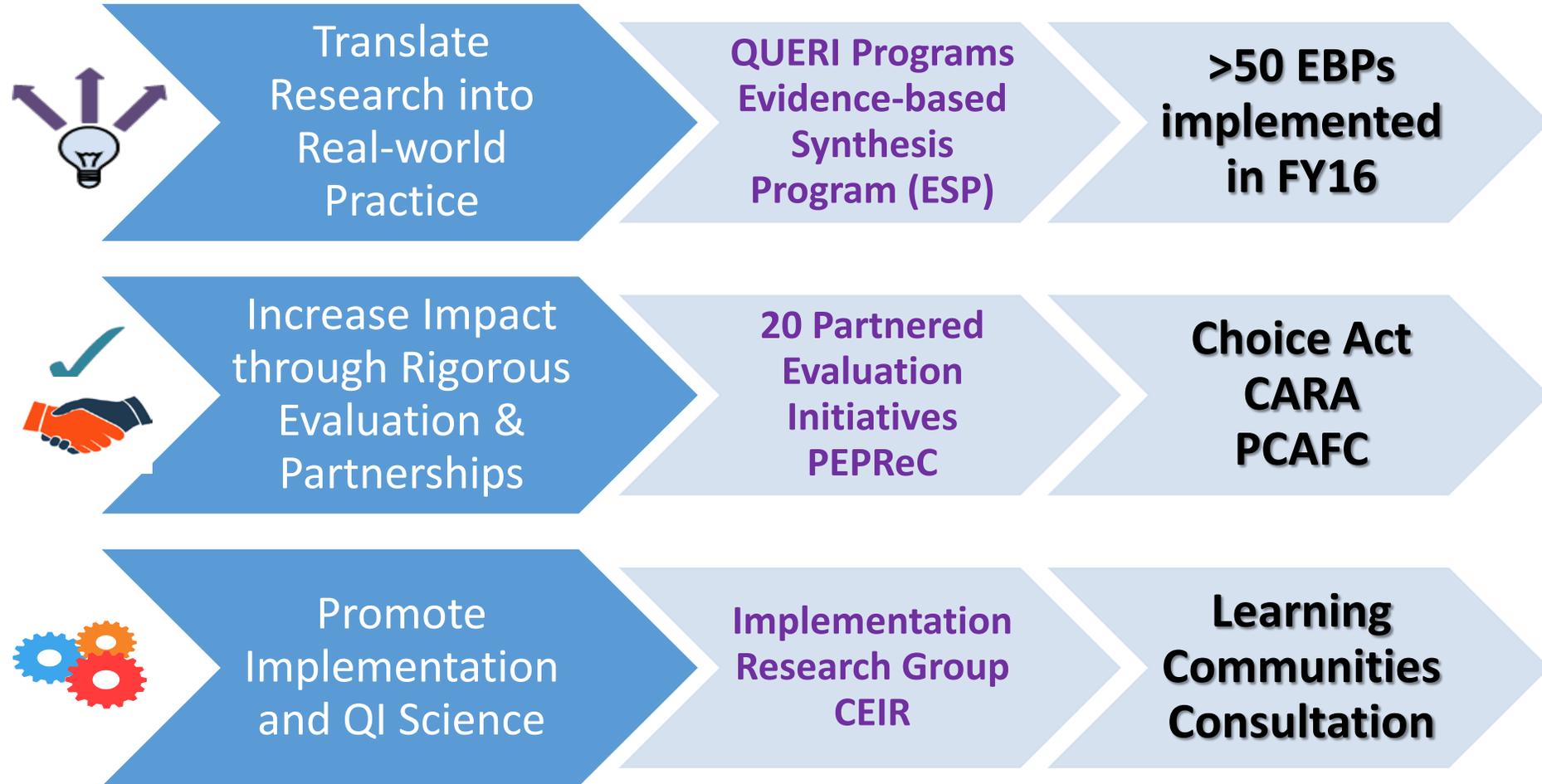
# The Frontline Provider



*Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it."*

*--A.A. Milne*

# QUERI Goals - Strategic Plan



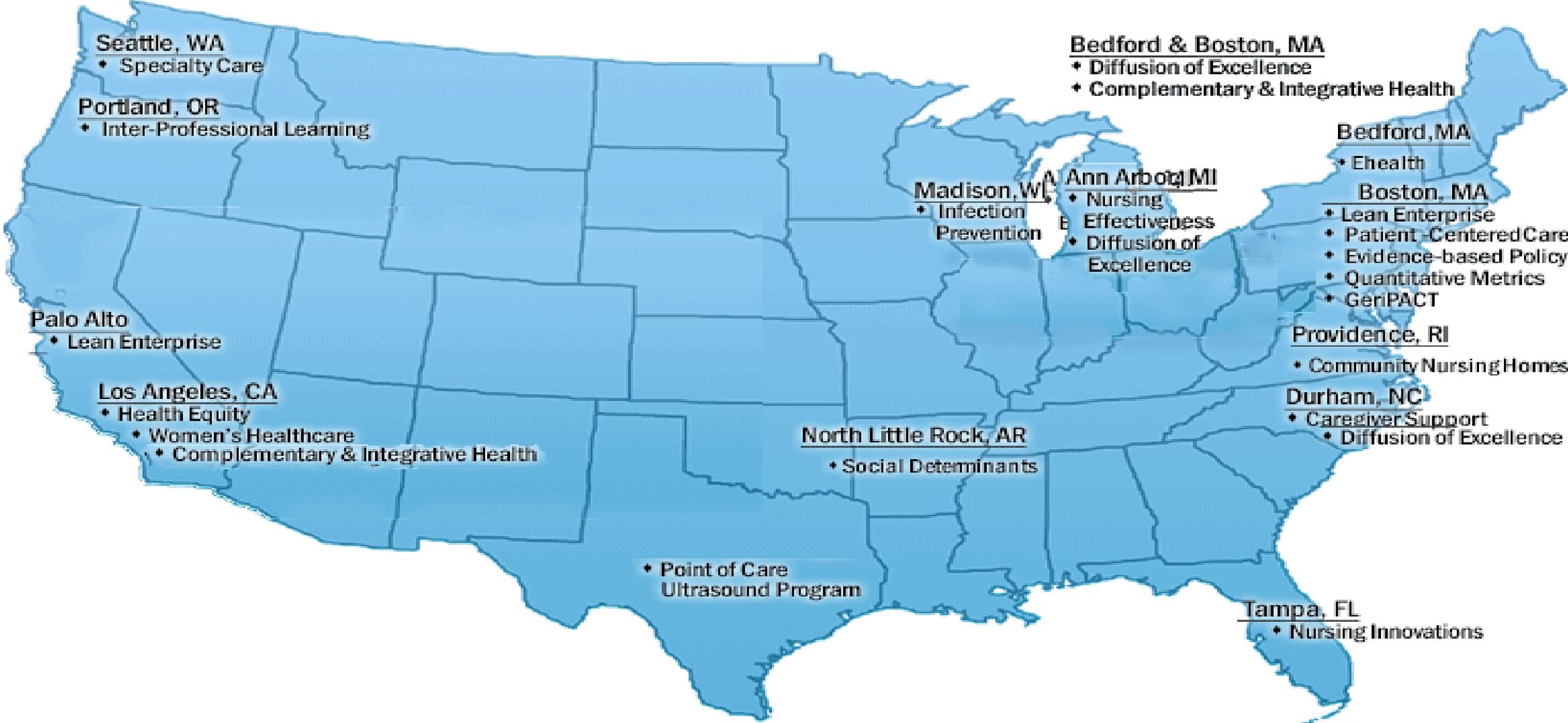
# National Network of QUERI Programs



# QUERI: National Implementation Resource

- National network of 15 programs that deploy implementation strategies to scale up and spread effective practices focused on VA priorities
  - Over 50 complex effective practices implemented in 2016 across multiple sites
  - Particular focus on implementation of complex practices in “late-majority” sites
- Implementation strategies are highly-specified, rigorously-tested methods that help providers improve use of effective practices when faced with organizational constraints (e.g., limited resources, competing demands)

# Partnered Evaluation Initiatives



# QUERI & Diffusion of Excellence Action Teams



# Growing the Diffusion of Excellence Initiative through Evaluation

Researchers from three different Quality Enhancement Research Initiative (QUERI) Programs and Health Services Research and Development Service (HSR&D) Centers are evaluating the Diffusion of Excellence Initiative to gain insight into how it is transforming the way VHA provides care for Veterans.

The evaluation aims to improve the Initiative and contribute to improved outputs for stakeholders, including Frontline Employees, Facility Leadership, and National Leadership.

The evaluation is designed to provide feedback to stakeholders and increase the diffusion of best practices by utilizing organizational- and individual-level human centered design.



# Measuring Success in QUERI:

## More Frontline Providers Adopting Effective Practices Using Implementation Strategies

- Implementation strategies are highly-specified, previously tested methods that help providers sustain effective practices in routine care
  - Extend top-down efforts (e.g., directives, guidelines, education) with bottom-up methods involving provider consultation, ownership through tailoring opportunities
  - Adapt to variations in effective practice uptake due to regional barriers (e.g., culture, competing demands)
- How does QUERI measure success?
  - More frontline providers using implementation strategies to adopt effective practices
  - More VA patients receiving effective practice
  - The implementation strategy pays for itself in cost savings, health improvement

*Example:*

*Opioid management program number needed to treat = 100*

*Average cost of hospitalization for overdose = \$9,000*

*Program implementation cost \$90 (\$9,000/100) to break even*

# Examples of Recent QUERI Impacts

- QUERI Implementation strategies were used to implement over 50 complex evidence-based practices across multiple sites in one year, e.g.,
  - Expanded telemental health (PTSD, suicide risk)
  - Pain/opioid management academic detailing best practices
  - Peer support integration
  - Collaborative Care Model spread (PACT, PC-MHI)
  - Data interoperability (OMOP Common Data Model)
- Rigorous evaluation methods informed VA national policies
  - Choice Act, Comprehensive Assistance to Family Caregivers, and CARA
  - Clarified non-research protocols, thus speeding deployment of studies
- QUERI ESP Center published several high-profile reports:
  - Cannabis for Pain/PTSD
  - Complementary & Integrative Health
  - Suicide Prevention Interventions
  - Pain Care Models

# QUERI Evidence-based Synthesis Program

**Health Disparities/Access**



**Complementary and Alternative Medicine**

**Health Systems/  
Implementation Strategies**



**Mental Health**

**Technology-based  
Assessments**



**Patient/Provider  
Interaction**

**Clinical Decision-making**



# QI Toolkit

## Quality Improvement (QI)/ Implementation Research (IR)

Malfeasance handled by Office of Medical Inspector, Office of Compliance & Business Integrity,  
Office of the Inspector General, & Office of the General Counsel

### Research Activities

(Typically researcher-led and  
researcher-funded)

Under the oversight of the  
Institutional Review Board  
(IRB) which, in turn, is under  
the Office of Research  
Oversight (ORO).

### Grey Zone:

QI Activities that  
Resemble Research  
OR  
Activities that combine  
research and QI activities

### Non-Research QI Activities

(Typically operations-led and funded  
through operations or QUERI)

No external, centralized  
locus of responsibility for  
oversight. Principal  
Investigator/Director is ultimately  
responsible for conduct.

Continuous Attention, Consultation and Accountability

Basic Ethical Principles:  
Respect for Persons, Beneficence, & Justice

[www.queri.research.va.gov/tools](http://www.queri.research.va.gov/tools)

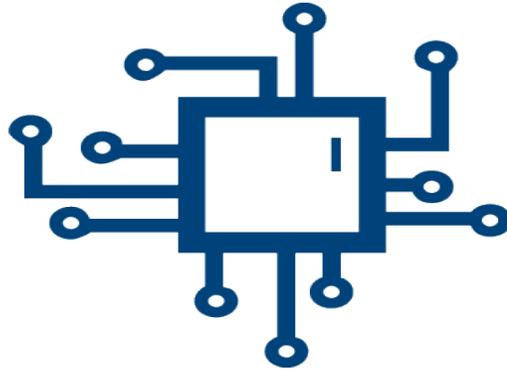
**But too often, we have assumed...  
“If you build it...”**



# Top 5 Priorities for VA



Greater Choice



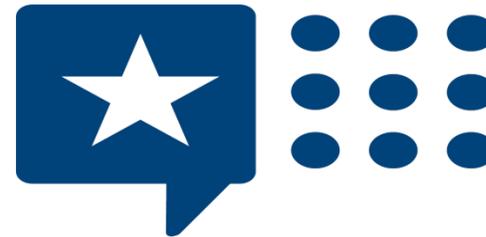
Modernize Systems



Efficiency



Improve Timeliness



Suicide Prevention

# VAVHA Priorities

## Greater Choice for Veterans

Clinical rather than administrative requirements (no more 40 miles rule)  
Alternative payment methodologies (i.e. pay for quality)  
Incorporates expanded provider agreements to create high performing integrated networks

## Modernize our systems

Field-based functional groups/governance  
EMR interoperability and IT modernization  
Market area optimization analysis

## Focus resources more efficiently

Foundational services (PC, MH, SCI, WH, TBI, Geriatrics)  
VA/DOD/Community coordination  
Make vs. buy

## Improve timeliness of services

Access to care and wait times  
Telephone care (Kaiser model)  
Telehealth expansion

## Suicide prevention- getting to zero

Partner with DoD  
Opioid safety initiative  
Open access to mental health services

# QUERI: Addressing Local and National Priorities in Modernization Era

- VACO priorities often focus on national management issues (access, budget, workforce) that are the concerns of managers/policymakers
- QUERI programs/PEIs focus on specific care processes, programs, or populations (concerns of clinicians)
- Initiatives of managers/policymakers cannot be successful unless they can work at the clinic level
  - But should involve ROI analyses, business case (will implementation pay for itself?)
- QUERI can provide the clinic-level expertise through a deep understanding of implementation barriers/facilitators
  - Require comprehensive data on providers, business processes, clinical outcomes

*Acknowledgement:  
Austin Frakt,  
Steven Pizer,  
PEPReC*

# QUERI and Changing VA Priorities

QUERI has broad reach, helping to implement over 50 complex EBPs across multiple VA sites.....

*But are we the go-to program for national implementation efforts?*

Diffusion of Excellence, Health Improvement Center, Innovators Network

What about local and regional impacts?

Decentralization

Local leadership performance plans - focus on innovations

***How are we essential to VA/ VISNs?***

# Facility/VISN Leadership Plan (FY18)

“VHA leadership will employ appropriate performance measurement resources, operational indicators, and analytic tools, e.g., Strategic Analytics for Improvement and Learning [SAIL], Strategic Analytics for Transformation [StAT], Specialty Productivity - Access Report and Quadrant [SPARQ], Primary Care Management Module [PCMM], Enrollee Health Care Projection Model [EHCPM], All Employee Survey [AES] results, Integrated Ethics (IE) Survey results....”

***Leading Change criterion:***

***Promote Modernized Systems through better consistency and spread of innovation & best practices.....***

# Facility/VISN Leadership Plans (FY18)

## Spread of Best Practices/Innovations

- “FS: will be defined by submission of 4 practices to Health Improvement Center (applies to VISN), or submission of 2 practices to the VISN Forum (applies to VAMC) and adoption/replication of at least 2 best practices in any facility(ies) in the VISN (applies to VISN), or adoption/replication of 1 best practice in the medical center (applies to VAMC).
- **Exceeds FS: As above, plus meaningful improvement in associated indicator(s) within the rating period**
- **Outstanding: As above plus spread to additional sites** Best practices may be adapted to address local needs and need not demonstrate 100% fidelity to the original model
- **Required: implementing best practices and learning for suicide prevention”**

# QUERI-VA Partnerships

National- Ongoing (“Top-Down”)

Diffusion of Excellence

Innovator’s Network

Health Improvement Center

Regional- Emerging (“Bottom-Up”)

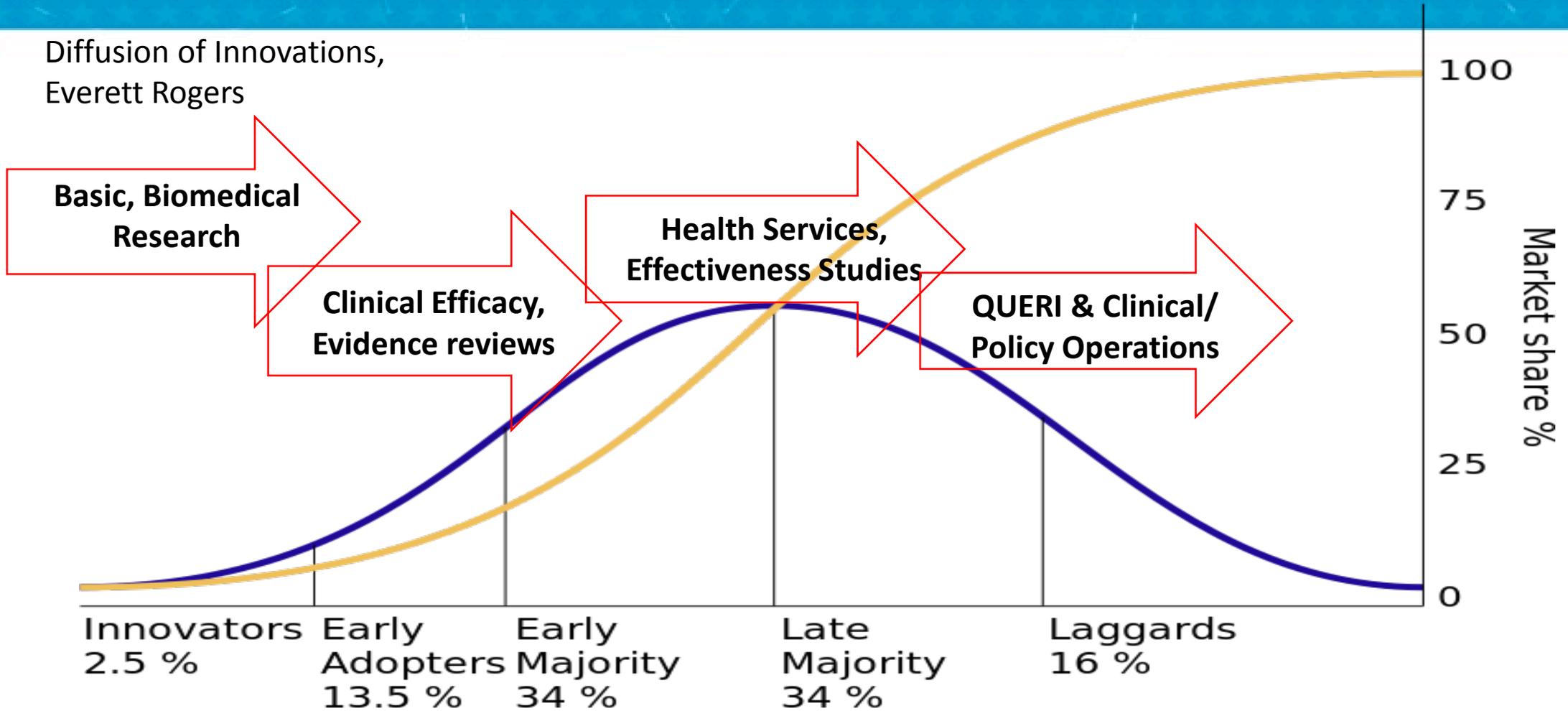
VISN Leadership

Foundational Services- Councils

***Have local leadership identify the problem***

# QUERI, Research, and Innovation Spread

Diffusion of Innovations,  
Everett Rogers



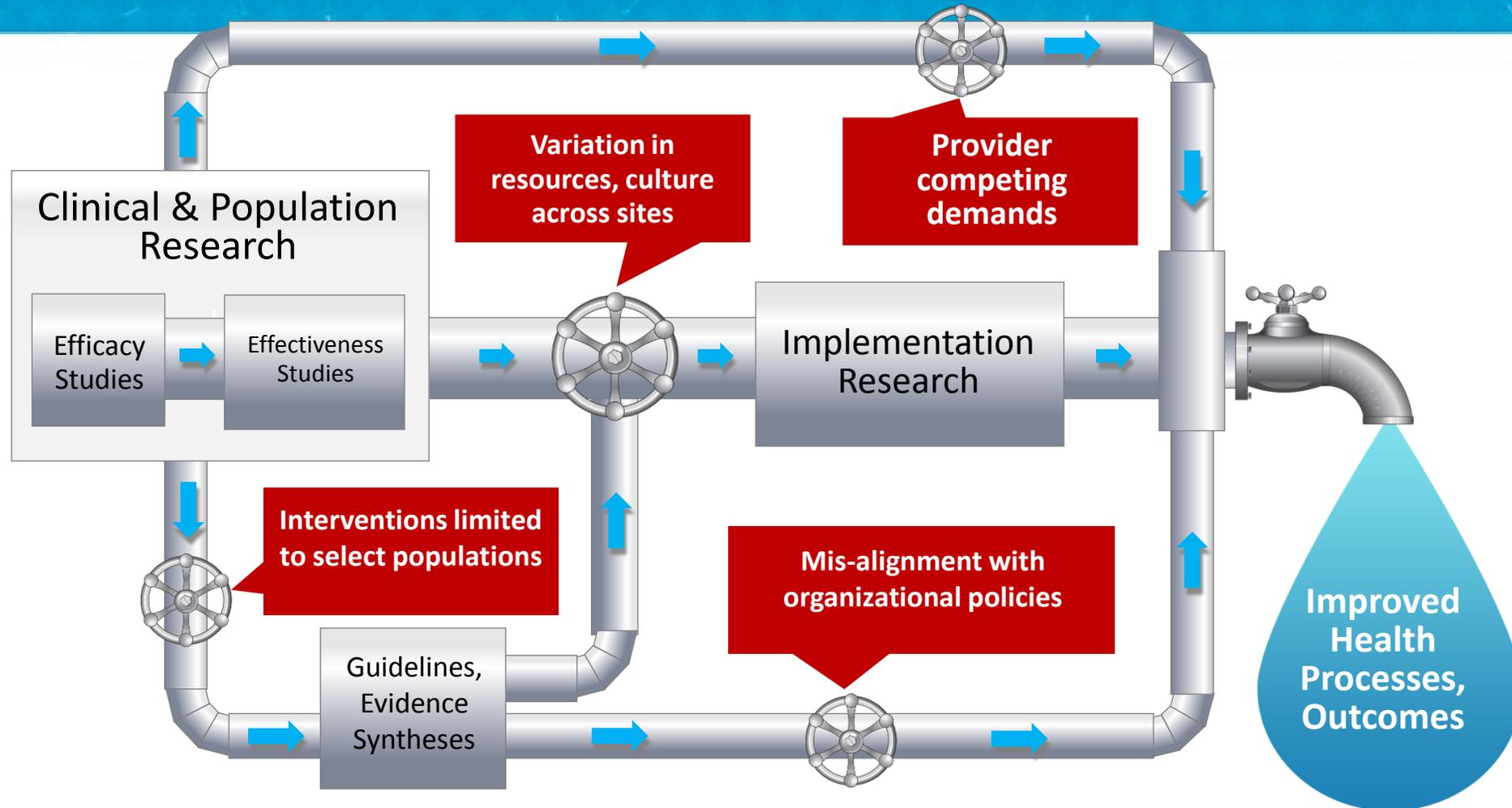
# How QUERI is Supporting Implementation of Suicide Prevention Initiatives

Resource- QUERI Center	Example
<p><b>Identify Effective Practices: Evidence-based Synthesis Program (ESP, research studies):</b> Identify best practices and barriers/facilitators to their implementation w/ops partner</p>	<p>ESP <a href="#">systematic review</a> on Suicide Prevention interventions  <i>Principal operations partner: Office of Mental Health &amp; Suicide Prevention (OMHSP)</i></p>
<p><b>Implementation: National network of 15 Programs:</b> Develop QI strategies to scale up and spread effective practices across different organizational settings in partnership with clinical operations (e.g., OMHSP, Primary Care, Specialty Care)</p>	<p>3 QUERI Programs (Behavioral Health, Pain and Virtual Specialty Care) deployed system-level QI strategies (e.g., Facilitation) targeting suicide risk factors, e.g., primary care-mental health integration, telehealth, pain treatment</p>
<p><b>Evaluation: Partnered Evidence-based Policy Resource Center (PEPReC):</b> Work with leaders to support development, evaluation of national policies</p>	<p>Coordinate national evaluation of policies and QI strategies to enhance implementation of REACH Vet and STORM with Office of Mental Health and Suicide Prevention</p>
<p><b>Sustainability: Center for Evaluation and Implementation Resources (CEIR):</b> Support VA national leaders on implementation and evaluation methods</p>	<p>Provide Operations Partner (Office of Mental Health and Suicide Prevention) tailored QI strategy plan especially for “late-majority” settings to promote long-term sustainability of clinical interventions for opioid misuse, suicide prevention</p>

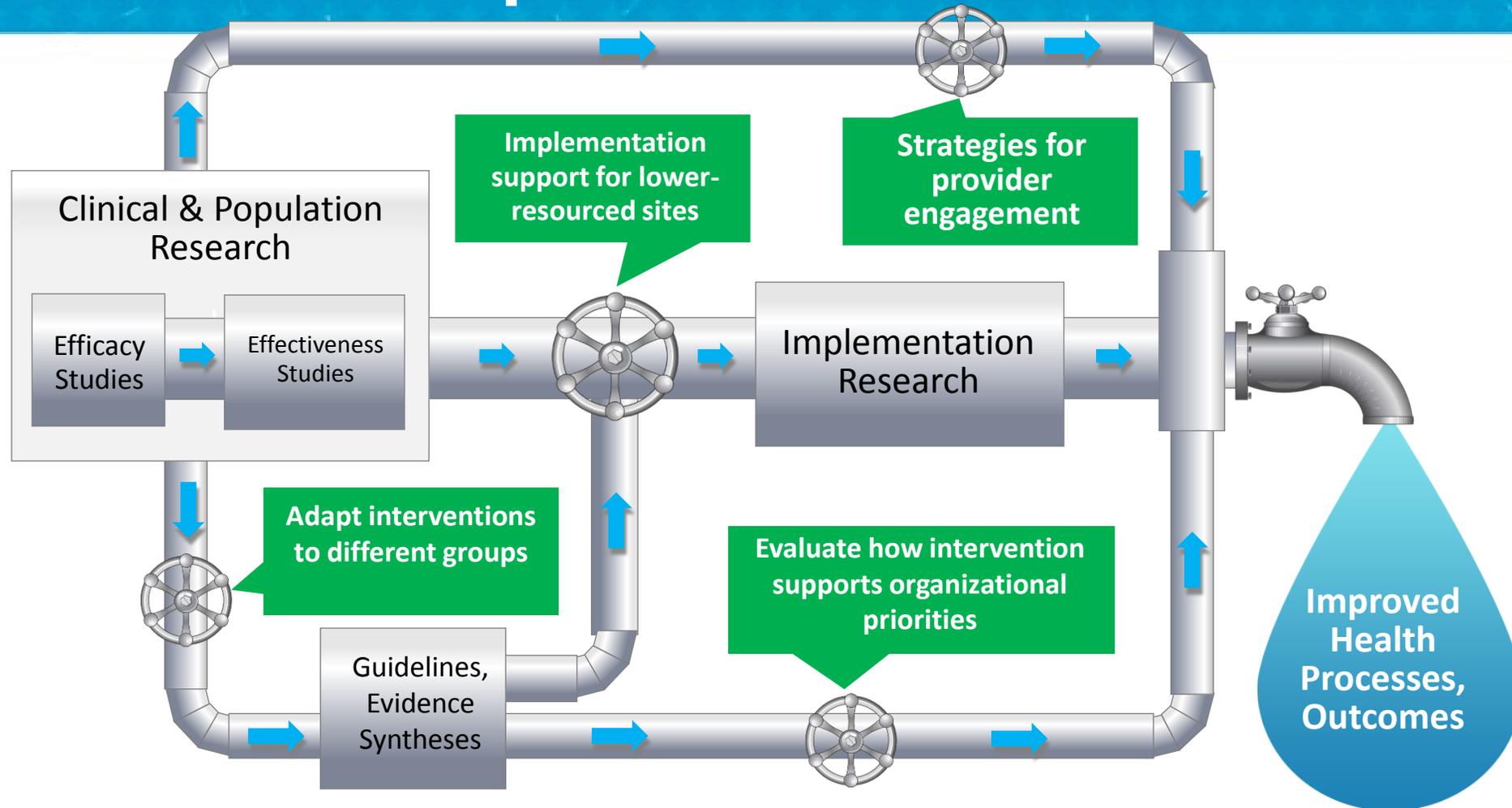
CEIR = QUERI Center for Evaluation and Implementation Resources; ESP = Evidence-based Synthesis Program;

PEPReC = Partnered Evidence-based Policy Resource Center

# What are the Key Barriers to More Rapid & Sustainable Implementation?

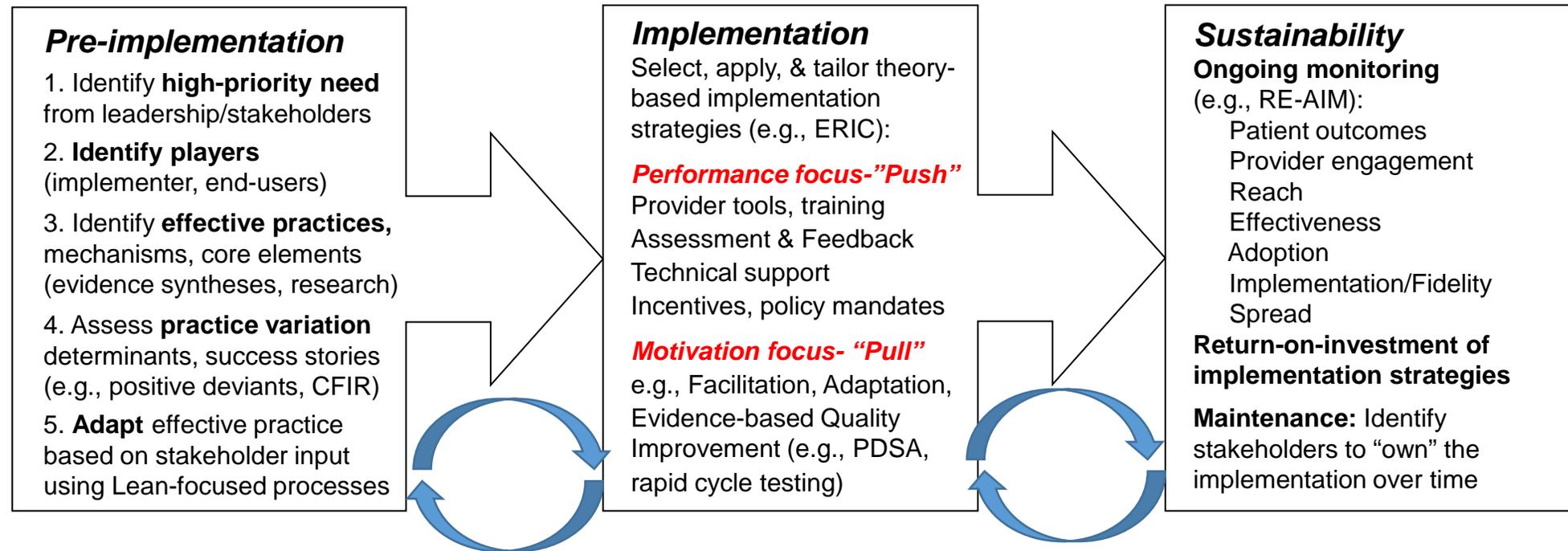


# QUERI Implementation Strategies Address Key Facilitators to Implementation and Sustainability



# QUERI Implementation Roadmap\*

How QUERI can support and sustain uptake of effective practices using top-down and bottom-up strategies

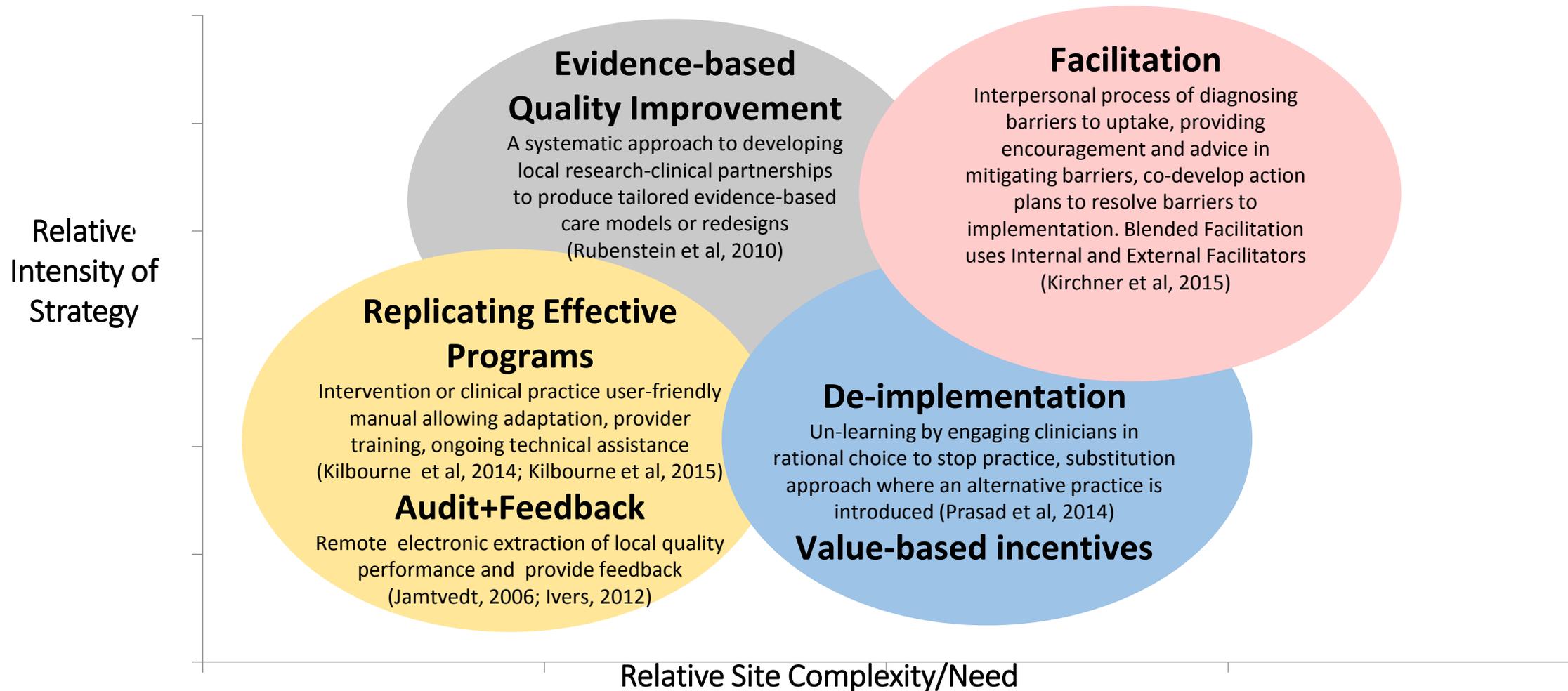


\*In 2017, QUERI updated its implementation model to focus more on rapid deployment of effective practices for Veterans, with a particular focus on supporting frontline providers in adopting and adapting effective practices identified as top SecVA priorities (Kilbourne 2017; Atkins, Kilbourne, Shulkin, 2017)

ESP = Evidence-based Synthesis Program; ORD = Office of Research and Development ; HSRD = Health Services research and Development

QUERI investigators apply a variety of quality improvement strategies, most of which are based on underlying implementation theories and core principles , notably Enhanced Replicating Effective Programs Framework (CDC, 1995; Kilbourne, 2007, 2012) which is based on Rogers Diffusion Model, Social Learning Theory, the Wandersman evidence-based system for innovation support model (EBSIS) (Wandersman 2012, Leeman 2015) Intervention Mapping (Maria Fernandez, Rinad Beidas), Transformation/Transaction Leadership models( Avolio), Aarons et al. 2012 Dynamic Adaptation Process Model, and Wiltsey-Stirman et al. (2013) framework. CFIR: Consolidated Framework for Implementation Research (Damschroder, 2009), ERIC: Expert Recommendations Implementing Change (Powell, 2015) RE-AIM: Reach, Adoption, Implementation, Effectiveness, Spread

# Examples of Implementation Strategies Used by QUERI

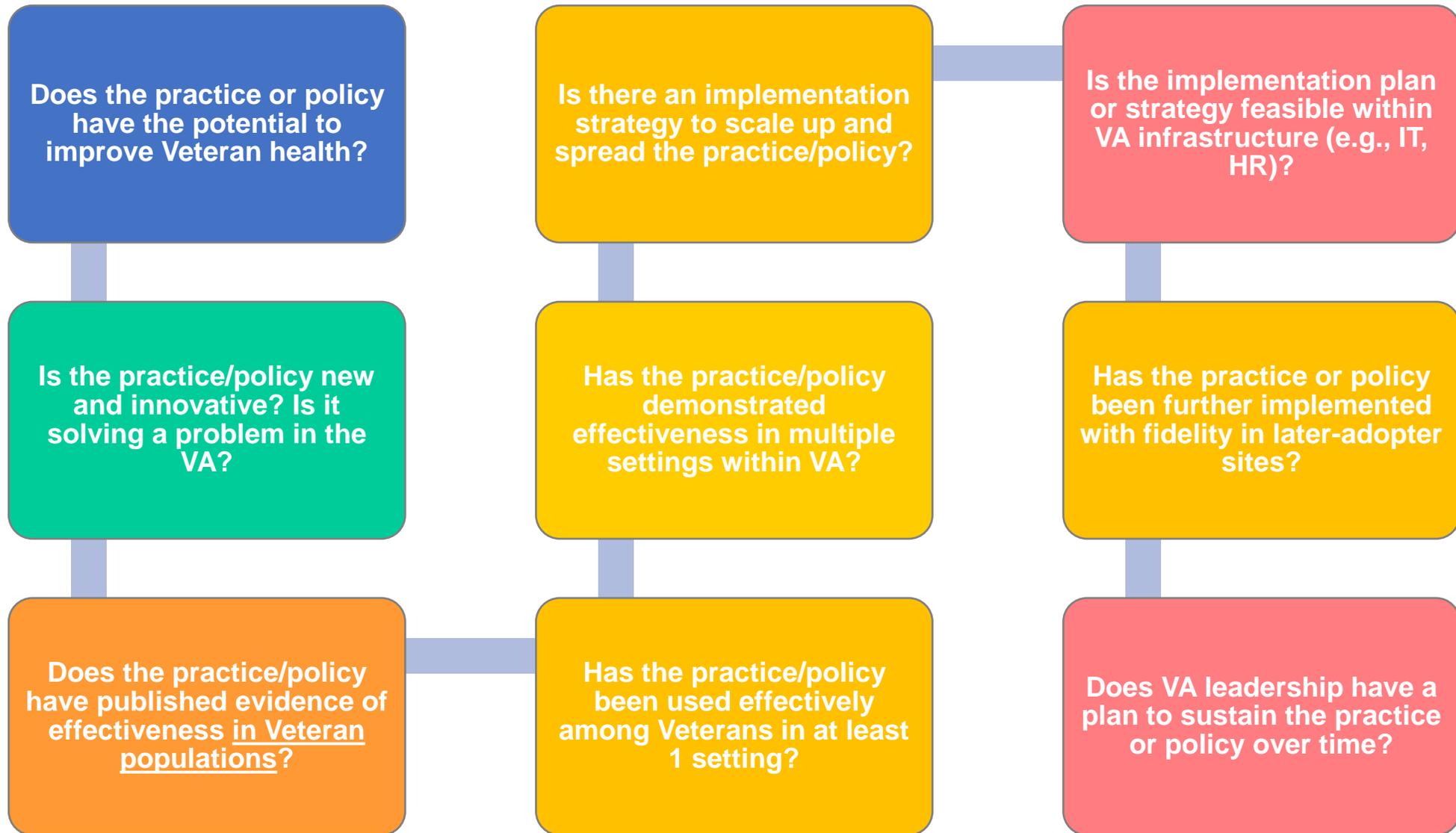


# A Strategic Vision for QUERI Integration

- QUERI's Center for Evaluation and Implementation resources (CEIR) is part of an **integrated QUERI effort to enable the rapid implementation of research evidence into routine clinical practice**
  - QUERI's **Evidence-based Synthesis Program (ESP)** works to identify the best practices for to adopt and spread to improve Veteran care
- 
- **CEIR and QUERI Programs** apply QUERI's deep knowledge in implementation science to help organizational leaders and frontline providers to design effective **implementation strategies** improve care with these practices in the face of organizational constraints
- 
- **Partnered Evidenced-based Policy Resource Center (PEPReC)**, and **QUERI partnered evaluations** bring strengths in rigorous program evaluation to systematically assess the clinical and economic impact of an innovation

*Acknowledgement:  
Nick Bowersox,  
PhD,  
Director, CEIR*

# VA Innovation Ecosystem: Implementing an innovative practice or policy to improve Veteran care



 [VA Innovators Network](#)

 [QUERI Evidence-Based Synthesis Program \(ESP\)](#)

 [QUERI Partnered Evidence-based Policy Resource Center \(PEPReC\)](#)

 VA Diffusion of Excellence (DoE)

 QUERI Center for Evaluation and Implementation Resources (CEIR)

# *On the Horizon*

- Balancing national priorities with local needs
- Implementation return-on-investment
- Data literacy
- Sustainability: “late-majority sites”, identifying the diamonds in the rough
- Capacity-building



# The Road Ahead

***“The role of the expert is going to shift, it won’t be the guy who has all of the answers but the guy who can convince other people to go along with the program”  
--Andy McAfee***



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***THANK YOU!***

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