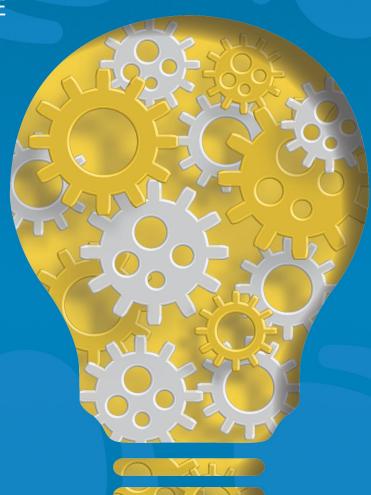


# Quality Enhancement Research Initiative (QUERI) 2021-2025 Strategic Plan

TRANSFORMING VETERAN CARE THROUGH ACCELERATING EVIDENCE INTO PRACTICE



**Published January 2021** 



## **Overview**

As the largest integrated health system in the U.S., the Veterans Health Administration (VHA), a part of the Department of Veterans Affairs (VA), serves 9 million U.S. Military Veterans across all 50 states and territories through its 170 medical centers, 1,000+ outpatient clinics, 320,000+ employees, and a \$729M research program.<sup>1,2</sup> The Quality Enhancement Research Initiative (QUERI) is a unique program that links VA research and clinical operations to ensure Veterans have access to leading-edge, scientifically-supported treatments. For more than 20 years, QUERI has been committed to improving the health of Veterans and their families by accelerating research findings into clinical practice and health care policy.

### Letters from the VHA DEAN and QUERI Director

## Letter from Dr. Carolyn Clancy, Assistant Under Secretary, Discovery, Education and Affiliate Networks (DEAN)

It is my great privilege, as Assistant Under Secretary for Health for Discovery, Education and Affiliate Networks (DEAN) to introduce the Quality Enhancement Research Initiative (QUERI) 2021 – 2025 Strategic Plan: Transforming Veteran Care through Accelerating Evidence into Practice.

Established in 1998, QUERI's mission is to improve Veteran health by accelerating the adoption of research findings into clinical practice. In the 23 years since, the program has become one of VHA's top research assets and one of the nation's leading programs devoted to eliminating the persistent gap between research and practice through cutting-edge implementation and quality improvement (QI) methods.



As an embedded program in the nation's largest integrated health care system, QUERI promotes the use of evidence-based practices that are relevant to Veteran needs. Since its establishment, QUERI has greatly improved the quality of care for Veterans, particularly with regard to mental health integrated care, virtual care, rapid testing in HIV and other conditions, stroke care, and cardiovascular disease management.

Further, QUERI has kept pace with numerous changes in health care delivery, as well as changing VA priorities and Veterans' needs, expanding from its original 10 disease-specific centers to more than 40 centers nationwide. Throughout QUERI's history, investigators have worked tirelessly with numerous stakeholders, including VA national leaders and local providers. A recent evaluation of 2016-2020 impacts found that QUERI investigators implemented over 60 effective practices, supported over 26,600 VA employees, and impacted hundreds of thousands of Veterans through its unique combination of scientific rigor and real-world rapidity.

Over the years, QUERI has also emerged as a national leader in the field of implementation science, or knowledge translation, i.e., the study of how to best support providers in enhancing the uptake of effective treatments in real-world care settings. Additionally, QUERI was an early adopter of the Learning Health System science, or the continuous process by which implementation informs new discoveries and causes effective treatments to be implemented into practice. It is not surprising, therefore, that the <u>Government Accountability Office (GAO)</u> recognized QUERI as a national leader in the translation of research into practice.

Throughout this journey, QUERI has forged strong partnerships, such as its collaboration with the Diffusion of Excellence Initiative. This effort includes training frontline employee innovators in implementation and knowledge translation science and implementing effective innovations across the VHA enterprise. QUERI has also worked to rapidly respond to health care priorities identified by VHA national, regional, and facility leaders. Recent topics

directly nominated by VHA local providers for further QUERI national implementation support include suicide prevention, opioid/pain treatment, and care coordination.

For 2021-2025, QUERI has identified several ambitious strategic goals: reduce unwanted clinical variation, provide rapid response to national priorities, deepen active partnerships with clinical operations, promote learning organization goals, and empower employees to move the needle on quality of care for Veterans. These goals, which require a crucial balance in rigor and response, will mean a more prominent role for QUERI in helping VA set clinical improvement priorities. Novel initiatives, such as the QUERI Program Rapid Response Teams, Veterans Integrated Service Network (VISN) Partnered Implementation Initiatives, and the QUERI Resource Center Collaborative, will support VA in achieving the goal of being a high-reliability learning organization that provides the best care anywhere. QUERI will also continue to be at the forefront of recruiting our most talented investigators and clinician leaders to work on implementation and knowledge translation initiatives in VA. To accomplish this goal, the program will invest in learning opportunities as well as incorporate new measures of impact through the QUERI ACTION (Alignment, Commitment, Tailoring, Informing the field, Observing healthcare changes, and generating New questions/projects) framework to measure real-world impacts and enable greater recognition for investigators who work to enhance quality of care for Veterans.

Moving forward, QUERI is poised to meet the challenges of a rapidly changing health care world, including the fast-changing dynamics of COVID-19. Throughout the pandemic, QUERI has continued to innovate and respond to new priorities (e.g., Swab Squad, tele-critical care learning communities, virtual provider leadership support, rapid scale-up of advanced care planning for Veterans).

As QUERI moves further into its third decade, all of us can look forward to outstanding work that improves the quality of VHA care for Veterans.

Carolyn Clancy, MD, Assistant Under Secretary, Discovery, Education and Affiliate Networks (DEAN)



#### Letter from Dr. Amy Kilbourne, QUERI Director, and Melissa Braganza, QUERI Program Manager

Welcome to the 2021-2025 QUERI Strategic Plan! As we enter the third decade of the 21st century and the third decade of QUERI's existence, we have a lot to be proud of in terms of the accomplishments of our investigators, staff, and operations partners. Since our last strategic planning process, QUERI has rapidly grown to encompass over 45 centers across the U.S. devoted to improving Veteran health. In doing so, we have accelerated adoption of over 60 effective practices, supported over 26,600 VA employees, and served at least 500,000 Veterans nationally.



Some notable accomplishments include but not limited to:

- National implementation with the VA Office of Mental Health and Suicide Prevention of the Behavioral Health Interdisciplinary Program of team-based care that reduced mental health hospitalizations.
- Rapid scale-up of medication-assisted treatment for opioid use disorder through virtual QI training and facilitation.
- Evaluation of the national implementation of VA's Whole Health initiative with the Office of Patient-Centered Care and Cultural Transformation, which demonstrated the growing use of complementary and integrative health practices among Veterans.
- Further spread of the STRIDE (assiSTed eaRly mobility for hospitalizeD older vEterans) program to reduce disability among hospitalized patients, in partnership with VA's Diffusion of Excellence Initiative.
- Development of nationally-recognized quality-improvement programs, including one that increased team collaboration among Community Living Center (CLC) staff.
- National improvements in stroke care by implementing the Acute Ischemic Stroke Directive QI program, which led to improvements in the rate of thrombolysis (breakdown of blood clots formed in blood vessels through medication).

QUERI is one of the VA's crown jewels at the forefront of implementation science, evaluation methods, and knowledge translation. Many of our investigators are national leaders in health services and implementation science, devoting their time to work as equal partners with frontline providers, clinical managers, and VA health care leaders to ensure Veterans get access to the highest quality of care no matter where they are seen. QUERI has informed national programs and policies through development of rigorous methods and tools, such as the QUERI Implementation Roadmap and Evaluation Toolkit, ultimately providing rigorous, unbiased evaluation support in response to the MISSION Act, Evidence-based Policymaking Act, and other legislative mandates.

With the COVID-19 pandemic, QUERI investigators have pivoted to better serve Veterans, their care providers, and clinical leaders, providing rapid access to effective practices and implementation support nationwide through virtual care. We are especially grateful for our diverse cadre of investigators, clinicians, implementers, and operations partners who are taking care of our Veterans in this time of great need.

Looking ahead, the 2021-2025 QUERI Strategic Plan is a living document, serving as a roadmap to support VA's evolution as a Learning Health System. Our goals are ambitious but serve to further accelerate VA's adoption of high-reliability principles by infusing QI and knowledge translation methods at all levels of the organization, ultimately improving care for Veterans through the consistent use of effective practices addressing their highest priority health care needs.



Amy Kilbourne, PhD, MPH, QUERI Director Melissa Braganza, MPH, QUERI Program Manager





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### **Executive Summary**

For more than 20 years, QUERI has been committed to ensuring U.S. Military Veterans and their families have access to cutting-edge treatments. Most recently, QUERI has supported VA efforts to implement multi-faceted treatments for opioid use disorder, telemental and virtual care programs in rural areas, and tailored collaborative care for women Veterans, among other initiatives.



#### **MISSION**

Improve Veteran health by accelerating evidence into health care practice and policy



#### VISION

Become a trusted purveyor of evidence, implementation, and quality improvement (QI) methods across VA, supporting frontline providers in deploying effective practices that transform Veteran care



#### **VALUES**

Excellence, Commitment, Partnerships, Rigor, Resilience, Flexibility

Located in the VA Office of Research and Development (ORD), QUERI was established in 1998 to move more research evidence, tools, and methods into routine care and ensure that Veterans benefit from research discoveries. As a bridge between research and health system operations, QUERI supports partnerships with more than 70 national, regional, and local health system leaders to implement, evaluate, and sustain effective practices that address cross-cutting health care areas.

- Population Health
- Care Coordination
- Care Continuity

- Safety and Quality
- Virtual Care
- Personalized Care

- Mental Health
- Access
- Health Equity

#### THREE-FOLD STRATEGIC METHODOLOGY

#### 1. Implement

Plan, deploy, and sustain effective practices across diverse settings

#### 2. Evaluate

Conduct rigorous evaluations to optimize programs and policies affecting Veterans

#### 3. Disseminate & Sustain

Promote the application of implementation and quality improvement sciences across the translation spectrum

Since its inception, QUERI has grown into a national network of 200+ investigators and clinicians dedicated to leveraging implementation and QI methods to improve the quality and safety of care delivered to Veterans.

During 2016-2020, QUERI investigators...

- 1. Implemented more than 60 effective practices across 18 VISNs, serving 500,000+ Veterans.
- 2. Evaluated 45+ national and regional VA programs and policies.
- **3. Disseminated** results through 500+ journal articles and promoted the scale-up, spread, and sustainment of implementation efforts through the development of 200+ scientifically-supported products.

#### Hallmarks of the 2021-2025 QUERI Strategic Plan

Informed by feedback from 150+ health system leaders, research stakeholders, and clinicians, the 2021-2025 Strategic Plan builds on previous successes and provides a framework for leveraging new opportunities and addressing challenges in response to the evolving health care landscape, VA priorities, and Veteran needs.

#### The 2021-2025 QUERI Strategic Plan outlines five goals:

- 1. Reduce unwanted clinical and service variation across VA.
  - a. Scale-up, spread, and sustain effective practices, particularly at sites experiencing quality gaps and focusing on diverse populations.
  - b. Promote consistency across implementation efforts.
- **2.** Build capacity to respond quickly to national and regional developments.
  - a. Support rapid, rigorous implementation and evaluation informing emerging health system needs.
  - b. Expand capacity for implementation and evaluation support.
- **3.** Deepen and expand partnerships across programs, geographic regions, and service lines.
  - a. Develop channels to accelerate research discoveries into VA care.
  - b. Focus and align resources by partnering with the VHA Innovation Ecosystem.
- **4.** Drive a culture of rapid learning in support of VA's transformation to a High Reliability Organization and Learning Health System.
  - a. Promote implementation and QI strategy training opportunities.
  - b. Develop, disseminate, and coordinate implementation resources.
- **5.** Empower employees to move the needle on quality of care.
  - a. Benchmark progress using health system and Veteran-centered metrics.
  - b. Cultivate QUERI teams representing diverse perspectives.

These five goals form QUERI's 2021-2025 action plan to transform Veteran care using evidence-based implementation, evaluation, dissemination, and sustainment methods.

#### **QUERI Implementation Roadmap**



https://www.queri.research.va.gov/tools/roadmap

## **QUERI Program and Goals**

#### **QUERI Mission, Vision, and Values**

Scientific research is integral to advancing health care and improving the health and wellbeing of individuals and communities, yet it takes 17 years for research discoveries to be used in routine care.<sup>3,4</sup> This time lag in the realization of research benefits is largely due to the reliance on passive diffusion of research findings to frontline health care workers who have growing demands and competing priorities. With the rapidly expanding body of biomedical research, changing clinical guidelines and recommendations, and emergence of novel technologies, frontline providers are navigating an untenable number of changes to ensure health care consumers receive the best possible care.<sup>3</sup> To accelerate the use of research findings in routine care, a proactive, systematic approach is critical to support clinicians and medical facilities in providing evidence-based care.

The interdisciplinary field of implementation science emerged in the 1990s to help narrow this gap between research and clinical practice, reduce research waste, and maximize the impact of research on health care. Theory-based implementation and QI methods arose, leveraging decades of research from other disciplines, including public health and psychology. These evidence-based strategies and tools were developed to support frontline staff and organizations in implementing evidence-based and promising interventions, programs, practices, and/or policies (hereafter referred to collectively as effective practices) and/or de-implementing low-value health care practices.

During this burgeoning period in implementation science, QUERI was established as a national program administratively under ORD's Health Services Research & Development (HSR&D) program to accelerate the adoption of research findings into clinical practice. HSR&D/QUERI investigators pioneered the application of several implementation strategies across different VA settings and clinical areas. These evidence-based strategies, including Implementation Facilitation, Evidence-Based Quality Improvement, and Design for Dissemination-Implementation, continue to be used widely to optimize national and regional implementation efforts.<sup>7-11</sup>

QUERI strives to address the research-to-practice gap by matching evidence to solve practical health care problems, designing and executing strategies and tools to support the uptake of effective practices, and continuously evaluating implementation efforts to ensure sustained improvements in care. QUERI's vision is to become a trusted purveyor of evidence, implementation, and QI methods across VA, supporting frontline staff in deploying effective practices that transform Veteran care.

"I frankly don't know what [we] would do without QUERI...an absolutely indispensable partner in providing objective third party implementation evaluation."

-National Program Office Leader

#### **QUERI's Unique Strategic Methodology and Structure**

To accomplish its vision, QUERI promotes mutually beneficial partnerships between academically affiliated investigators and health system clinical operations leadership. QUERI's unique location in ORD and its dedicated funding for implementation practice enables the flexibility and nimbleness needed for developing cross-cutting partnerships and accelerating research into practice.

ORD's services span the full research translation spectrum: basic, translational, clinical, health services, and rehabilitative research. QUERI,

#### VA Office of Research & Development<sup>2</sup>

- \$729M budget
- 105 research sites
- 3,611 principal investigators
- 7,372 research projects
- 11,000+ published articles

as the last part of the translation spectrum, adapts rigorous research methods and findings to meet health system priorities and Veteran needs. Like other ORD projects, QUERI-funded initiatives undergo a competitive scientific merit review and funding process and receive research resources, administrative support, and benefits (*Figure 1*). In



this way, VA investigators are empowered to lead implementation and QI efforts focused on moving more research into routine care, enhancing the real-world impact of research, and ensuring that Veterans benefit from research innovations. Since its inception in 1998, QUERI has grown to support a national network of 200+ investigators who have completed more than 500 rigorous peer-reviewed implementation, evaluation, dissemination, and training initiatives addressing VA priorities.

Figure 1. ORD's Unique Strengths



Diverse, integrated, national health system



Rapid evaluation and iterative refinement for systemwide improvement



Dedicated budget for research and implementation



170 medical centers1,000+ outpatient clinics9 million Veterans



Veteran-centered evidence and solutions



Investigators with clinical and scientific expertise



2+ decades of rich electronic health record (EHR) and administrative data



High proportion of persons living in rural areas



Research spans full translation spectrum

QUERI applies a three-fold strategic methodology focused on implementation, evaluation, dissemination, and sustainment with the ultimate goal of optimizing VA services and care to help Veterans and their families stay healthy (*Figure 2*).

Figure 2. QUERI's Strategic Methodology



#### **Implement**

Plan, deploy, and sustain effective practices across diverse settings

Enhance Veteran access to cutting-edge, personalized treatments



#### **Evaluate**

Conduct rigorous evaluations to optimize programs and policies affecting Veterans

Develop mutually beneficial partnerships

Inform rollout of highpriority initiatives



#### **Disseminate & Sustain**

Promote the application of implementation and quality improvement sciences across the translation spectrum

Drive a culture of learning and knowledge translation across VA

QUERI funds more than 45 field-based centers that apply evidence and promote the use of implementation and QI methods to address VA challenges and improve the quality of care provided to Veterans. QUERI's six types of centers focus on different aspects of QUERI's strategic methodology (*Figure 3*).

Figure 3. Overall Structure of QUERI

### 1. Implement

QUERI Programs develop strategies and tools to support the scale-up and spread of effective practices

QUERI-VISN Partnered Implementation Initiatives (PIIs) deploy effective practices that address time-sensitive regional priorities

#### 2. Evaluate

Partnered Evaluation Initiatives (PEIs) evaluate a policy or program affecting Veterans

Partnered Evidence-based Policy Resource Center (PEPReC) performs data analysis for VA policy, planning, and management initiatives

## 3. Disseminate & Sustain

Implementation Strategy Learning Hubs provide training in implementation and quality improvement strategies

Center for Evaluation and Implementation Resources (CEIR) develops resources and provides guidance to support implementation efforts

QUERI centers leverage implementation strategies to expand Veteran access to evidence-based care, evaluation methods to optimize the rollout of VA programs and policies affecting Veterans, and dissemination and sustainment strategies to promote the application of implementation and QI sciences across VA.

#### 1. Implement

- ➤ **QUERI Programs** are interdisciplinary centers that partner with national and regional leadership to develop implementation and QI strategies and tools that accelerate the uptake and sustainment of effective practices addressing a cross-cutting, multi-level VA impact goal.
- ➤ QUERI-VISN Partnered Implementation Initiatives (PIIs) are learning networks, led by VISN leaders and investigators, that rapidly implement effective practices to address a time-sensitive regional priority with the goal of significantly moving the needle on quality of care.

#### 2. Evaluate

- Partnered Evaluation Initiatives (PEIs) are partnerships with national or regional leaders to evaluate and optimize a VA program or policy affecting Veterans.
- ➤ Partnered Evidence-based Policy Resource Center (PEPReC) is an economics center that designs and conducts program evaluations, develops metrics, and provides technical assistance to support broad ranging VA policy, planning, and management initiatives.

#### 3. Disseminate and Sustain

- ➤ Implementation Strategy Learning Hubs are a network of training sites that promote the use of implementation and QI strategies across VA.
- Center for Evaluation and Implementation Resources (CEIR) is a resource center that creates implementation and evaluation resources, develops and refines implementation plans, provides rapid consultations for selecting strategies to optimize VA implementation efforts, and facilitates connections between multi-level stakeholders across VA.

#### 2021-2025 Strategic Plan Overview

The 2021-2025 QUERI Strategic Plan provides a roadmap for implementation of QUERI's priorities at the frontline level. The updated Strategic Plan builds on prior successes of the 2016-2020 QUERI Strategic Plan and incorporates feedback from 150+ health system leaders, research stakeholders, and providers to ensure alignment with VA and Veteran needs. The 2021-2025 QUERI Strategic Plan focuses on five goals to advance Veteran care using evidence-based implementation, evaluation, dissemination, and sustainment strategies.

- 1. Reduce unwanted clinical and service variation across VA.
- 2. Build capacity to respond quickly to national and regional developments.
- **3.** Deepen and expand partnerships across programs, geographic regions, and service lines.
- **4.** Drive a culture of rapid learning in support of VA's transformation to a High Reliability Organization and Learning Health System.
- 5. Empower employees to move the needle on quality of care.

These five goals are informed by an evaluation of the overall QUERI program and a strategic analysis of Congressional and VA priorities, emerging trends in health care, and new developments in health services and implementation research.

## **Strategic Planning**

Striving to be an enterprise-wide resource for evidence-based implementation and evaluation methods, QUERI conducted a strategic analysis and comprehensive evaluation to understand cross-cutting priorities across multi-level stakeholders, including Congress, National Program Offices, VISNs, VA Medical Centers (VAMCs), service lines, and ORD (*Figure 4*).

- **Strategic analysis** of stakeholder priorities and trends in health services research using multiple resources (e.g., literature review, leading health care organization and federal agency websites).
- **QUERI mixed methods evaluation** to gather feedback from key stakeholders and understand QUERI's 2016-2020 impacts.

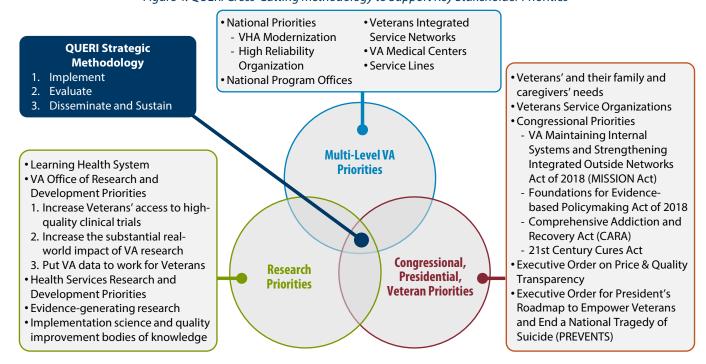


Figure 4. QUERI Cross-Cutting Methodology to Support Key Stakeholder Priorities

### Strategic Analysis

With the evolving health care landscape moving toward efficient consumer-centered care, VHA, like other U.S. health systems, is undergoing a transformation focused on:

- Enhancing access to care.
- Reducing unwarranted clinical and service variation.
- Moving toward zero harm (maximizing patient safety).
- Modernizing systems, such as electronic health records (EHRs).
- Increasing productivity and efficiency.

Along with these key health care trends, VHA is focused on implementing Congressional and long-term priorities related to greater Veteran choice, price and quality transparency, and suicide prevention and opioid safety (see "Key Legislative and VA Priorities" for additional detail on VHA's priorities).

In an effort to better address these priorities, QUERI strives to stay on the forefront of advancements in health services research and implementation science. Recent trends in these fields are driving a shift toward more rapid and practical integration and application of research in real-world settings to ensure individuals, communities, and organizations benefit from research investments.

**Impact Focus.** From the National Academy of Medicine to the National Institutes of Health (NIH), there is an increasing focus across research funding agencies and scientific organizations on enhancing the impact of research.

- The National Academy of Medicine's "The Future of Health Services Research: Advancing Health Systems Research and Practice in the United States" report describes the importance of developing data infrastructure and ensuring results lead to system-level improvements. A key recommendation from the report is the need for more "problem-focused" research, where the questions are proposed by the health system, community organization, providers of care, and patients to ensure research produces impacts that are meaningful to clinical end-users and consumers.<sup>12</sup>
- NIH's Clinical and Translational Science Awards (CTSA) Program expands opportunities in implementation science, embedding implementation methods across the translation spectrum.<sup>13</sup>

**Learning Health System Approach.** As a model of how research can enhance real-world impact, the Institute of Medicine's cyclical three-part Learning Health System focuses on improving systemwide, cost-sustainable quality of care through leveraging performance and research data. The <u>Agency for Healthcare Research and Quality (AHRQ)</u> has developed a variety of resources, including competencies and training, to support Learning Health System goals.

Along with the Institute of Medicine and AHRQ, VHA and several other health organizations are deploying Learning Health System principles to support organizational goals. Examples include but are not limited to:

- NIH's National Cancer Institute and National Center for Advancing Translational Sciences (NCATS) are exploring
  implementation science's role and building capacity in supporting and complementing Learning Health
  System and precision medicine approaches to transforming patient care.<sup>13,15</sup>
- VA's HSR&D service has created new mechanisms focused on fostering Learning Health System approaches and is exploring other ways to decrease unwanted clinical variation nationally. 13,16
- NYU Langone Health is employing rigorous rapid cycle randomized testing of existing systemwide initiatives to de-implement ineffective programs and optimize valuable programs for consumers, clinicians, and support staff.<sup>17</sup>
- Cincinnati Children's Hospital is forming pediatric learning health systems for both specific conditions with the <a href="ImproveCareNow network">ImproveCareNow network</a> and broader-reaching health care goals with the <a href="PEDSnet project">PEDSnet project</a>. 18

#### 2016-2020 QUERI Strategic Plan and Evaluation

In 2015, the <u>2016-2020 QUERI Strategic Plan</u> was released, highlighting QUERI's essential role in bringing together VA investigators and health system leaders to rapidly implement and evaluate clinical programs and policies and achieve VA performance goals.<sup>19</sup>

In October 2018, a program evaluation began to assess QUERI's progress toward 2016-2020 Strategic Plan goals, identify

"[What] I enjoy most about QUERI projects is the focus on timely improvements in Veteran care. Essentially, these projects are trying to improve Veteran care today or tomorrow, as opposed to many years in the future."

-HSR&D/QUERI Investigator

successes and challenges during 2016-2018, and re-calibrate the QUERI Strategic Plan for 2021-2025 around current VA priorities. The program evaluation included a portfolio analysis, online surveys, and semi-structured



telephone interviews of key stakeholders, including health system leadership and QUERI investigators. The portfolio analysis assessed QUERI's impact across Veterans, VA employees, VISNs, and National Program Offices.

\$35M+ 500.000+ 200+ 500 + Journal **Partnered** Veterans **Products Articles** Support 45+ 70+ National National & 26,600+ VA & VISN Regional **Employees** Program **Partnerships** <u>Evaluations</u>

Figure 5. Summary of QUERI's 2016-2020 Impacts

Key themes emerged from the evaluation of QUERI's progress toward 2016-2020 goals, including:

#### **QUERI Strengths**

- Promoting productive multi-level research-operations partnerships across VA.
- Rapidly responding to critical VA priorities and changing Veteran needs.
- Supporting VHA's transformation to a Learning Health System through the use of rigorous evaluation methods to inform health care policy and programs.
- Accelerating care improvements through cutting-edge implementation and QI science methods to enhance real-world impact.

"QUERI actively solicits topics of local interest, and then follows up. Can't ask for more!"

-VA Facility/VISN Leader

#### **QUERI Challenges**

- Lacking a "seat at the table" in prioritizing national VA implementation goals.
- Balancing QUERI investigator interests and timelines with regional and national operations priorities and time-sensitive needs.
- Managing growing demand in implementation and evaluation support with a relatively flat year-by-year budget.
- Communicating QUERI impacts and partnership opportunities to regional and facility leadership across diverse geographical regions and service lines.
- Implementing and sustaining effective practices at sites with competing priorities, evolving needs, and turnovers in leadership.

"From my perspective, the science has been excellent... but is very situational. Needs political support as well."

-VA National Program Office Leader

#### **QUERI Opportunities**

- Enhancing translation and dissemination of QUERI partnership opportunities, impacts, products, and resources across multiple stakeholders nationally.
- Expanding implementation and QI training opportunities.
- Supporting National Program Offices on time-sensitive initiatives and emerging priorities.
- Gathering regular feedback from regional and facility health system leaders in prioritizing QUERI implementation support.
- Providing essential support to implement key components of the Foundations for Evidence-Based Policymaking Act in VA.
- Developing closer relationships with other ORD services and programs.

"[We] need toolkits geared for laypersons."

-VA National Program Office Leader



## 2021-2025 QUERI Strategic Plan

#### Goal 1. Reduce unwanted clinical and service variation across VA

To further VA's priorities focused on reducing unwarranted variation across integrated clinical and operational service lines and ensuring zero harm, QUERI Programs and QUERI-VISN PIIs work closely with health system leadership to deploy effective practices that align national priorities with local needs. In an effort to focus implementation efforts on high-need sites, QUERI investigators and health system leadership jointly identify sites and metrics for benchmarking success.

For 2021-2025, QUERI will support sites experiencing quality gaps and integrate health equity across all QUERI efforts. Implementation strategies and effective practices can be adapted to support specific site needs and address health disparities. For example, engagement and buy-in from end-users (e.g., clinicians) across different treatment settings and populations—in addition to leadership support—is central to many implementation strategies. QUERI investigators are encouraged to implement effective practices at high-need sites and improve care for diverse populations.

QUERI Programs now include the following components to promote scale-up, spread, and sustainment of effective practices to ensure continued Veteran benefit (*Figure 6*).

- **Multi-level partnerships** with National Program Office(s) representing two or more distinct VHA service lines and/or cross-cutting areas and one or more VISNs.
- **Implementation and sustainment** of 2-3 effective practices across 12-18 geographically diverse sites with a focus on sites experiencing quality gaps.
- Tracking of quality of care data based on VHA Network Director and Medical Center Director Performance Plan goals and relevant VA performance metrics from Strategic Analytics for Improvement and Learning (SAIL), provider experience data from the VA All Employee Survey, and other publicly-reported quality and outcome metrics identified by the National Quality Forum and the Centers for Medicare and Medicaid Services (CMS).
- **Data-driven evaluations** to support the business case and value proposition for operations partners and inform ongoing sustainment of the effective practices and implementation strategies over time.

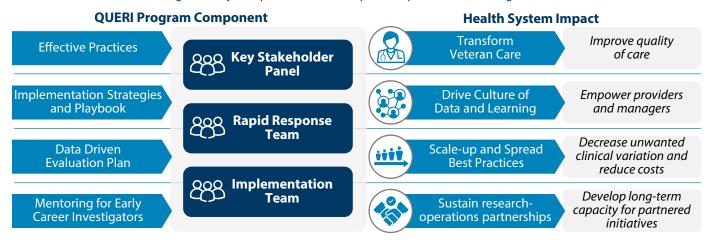


Figure 6. Key Components and Anticipated Impacts of QUERI Programs

## Objective A. Scale-up, spread, and sustain effective practices, particularly at sites experiencing quality gaps, focusing on diverse populations

QUERI has two pathways for widespread implementation of effective practices:

- QUERI Programs
- QUERI-VISN PIIs

Designed as learning laboratories, QUERI Programs develop evidence-based methods and tools to address key VA challenges. The 2021-2025 QUERI Program structure builds on the successes of the 2015-2020 QUERI Programs and incorporates new elements to promote sustainability for continued Veteran benefit, nimbleness to address emerging VA needs, and greater alignment with health system performance plan goals.

The 2021-2025 QUERI Programs encompass a range of cross-cutting health care areas that address a VA priority and reflect the priorities of multi-level stakeholders (*Figure 7*). The 14 Programs are:

- Using 20+ implementation and QI strategies.
- Partnering with 25+ VA Program Offices and 15 VISNs.
- Scaling-up, spreading, and sustaining 38 effective practices across VA.
- Addressing health care gaps and tailoring effective practices to meet the needs of Veterans residing in rural areas, aging populations and caregivers, high-risk Veterans with multiple conditions, women Veterans, and homeless Veterans.

Figure 7. 2021-2025 QUERI Programs



#### **AGE FRIENDLY HEALTH SYSTEM**

- Improve safety and quality of care and promote the well-being of older Veterans
- Facilitation, Project-specific Strategies



#### **MEASUREMENT SCIENCE**

- Integrate measurement science into health care for Veterans
- Audit and Feedback, Project-specific Strategies



#### **BEHAVIORAL HEALTH**

- Advance care and prevent suicides for Veterans with complex behavioral health conditions
- Implementation Facilitation, Centralized Technical Assistance



#### **MIDAS**

- Reduce unsafe, ineffective medication use toward zero harm
- Learn. Engage. Act. Process. (LEAP), Enhanced Academic Detailing



#### BRIDGE

- Bridge the care continuum for vulnerable Veterans across VA and Community Care
- Implementation Facilitation, Academic Detailing



#### PERSIVED

- Promote Veteran choice and shared decisionmaking and prevent unwanted, burdensome treatment
- Audit and Feedback, Facilitation



#### **CARRIAGE**

- Improve biosurveillance, infection prevention, and antimicrobial stewardship
- Implementation Facilitation, Audit and Feedback



#### **QUADRUPLE AIM**

- Enhance care coordination between VA and community providers
- Relational Facilitation, Iterative RE-AIM



#### **EMPOWER**

- Expand access to preventive and mental health services for women Veterans
- Replicating Effective Programs, Evidence-Based Quality Improvement



#### RIVET

- Advance VA's primary care capacity to provide comprehensive care for complex, high-risk Veterans
- Evidence-Based Quality Improvement



#### **EXTEND**

- Enhance Veteran access by expanding and optimizing telehealth services
- Systems Redesign, External Facilitation, Local Adaptation, Precision Monitoring with Feedback



#### SHAARK DYNAMIC DIFFUSION NETWORK

- Scale-up and spread Diffusion of Excellence Initiative practices in late adopter sites
- Dynamic Diffusion Network, Technical Assistance



#### **FUNCTION & INDEPENDENCE**

- Optimize function and independence for Veterans at risk for developing a disability
- Replicating Effective Programs, CONNECT



#### **VIRTUAL CARE FOR RURAL VETERANS**

- Expand access to high quality care in Community Based Outpatient Clinics
- User Centered Design, External Facilitation, Project-specific Strategies



In addition to the Programs, QUERI-VISN PIIs are VISN-directed initiatives for providing QUERI implementation support on the priority areas that keep VISN leadership "awake at night". PIIs were developed to enable investigators and regional leaders to work together to improve quality of care by supporting implementation of effective practices using strong implementation and QI methods.

In December 2017, QUERI kicked off the first annual priority nomination process to align QUERI resources with regional and local priorities and implement VISN priorities at the frontline level (*Figure 8*). QUERI collects priority nominations from VISN and facility leadership, and VISN Directors vote on their top three priorities requiring QUERI implementation support.

Figure 8. QUERI-VISN Partnered Implementation Initiative Two Phase Process

Solicitation and selection of top 3 VISN priorities

\$100K QUERI award to implement an effective practice at one site within 1 year

\$100K QUERI award to implement an effective practice at one site within 1 year

Formation of VISN learning network to share learnings and enhance strategies

Multi-million dollar QUERI award to implement effective practice(s) across ≥18 sites and ≥3 VISNs

The first cohort of implementation teams funded through this mechanism have resulted in the rapid deployment of implementation and QI strategies for opioid use disorder and pain treatments and suicide prevention across 12 VISNs.

- Opioid Use Disorder and Pain Treatments: Consortium to Disseminate and Understand Implementation of Opioid Use Disorder Treatment (CONDUIT) is expanding access to effective treatments for pain and opioid use disorders across the care continuum, including primary care, specialty care, hospitals, and telehealth services, in 57 sites across VA.
- Suicide Prevention: The Caring Contacts for Suicide Prevention in Non-Mental Health Settings PII is scaling-up and spreading Caring Contacts, an effective practice that involves sending brief, non-demanding expressions of care to Veterans at risk for suicide, across emergency department and urgent care settings in 29 VAMCs.





In addition to the annual priority nomination process and QUERI-VISN PII mechanism, QUERI continues building on these successes to deepen partnerships with VISNs by:

- Presenting updates on regular calls with VISN and facility leadership.
- Assessing VISN needs through an annual survey of VISN and facility leadership.
- Aligning national and local resources and gathering feedback through the QUERI National Stakeholder Forum, comprised of VA national and regional operations leaders, ORD leadership, QUERI resource center leads, and VA investigators. (See 2020 QUERI National Stakeholder Forum Membership List for the full list of members).

#### Objective B. Promote consistency across implementation efforts

To foster the use of evidence-based methods and reduce unwarranted implementation variation across the VA, the QUERI Implementation Roadmap is used as the foundation for OUERI Program and PII implementation efforts. The QUERI Implementation Roadmap was developed as a user-friendly, systematic approach to optimize implementation of an effective practice and maximize the desired impact on quality of care and Veteran health outcomes. Emphasizing engagement and alignment of key stakeholders around shared priorities, goals, and metrics, the Roadmap de-mystifies stateof-the-art implementation science methods to help frontline providers, clinical managers, and health system leaders address complex organizational constraints and barriers.<sup>22</sup>

The Roadmap employs a three-phase cyclical approach in a Learning Health System context to promote continuous learning and accelerate care

What is the problem?
What adaptations or resources are needed for local fit?
What are the best practices?
What is the impact on clinicians and the system?
Who owns the process?

Figure 9. Summary of QUERI Implementation Roadmap

improvements. <sup>14,23</sup> Each phase includes fundamental questions that key stakeholders need to address to ensure successful implementation (*Figure 9*).

With a focus on the development of practical products, including an implementation playbook, and a data-driven evaluation plan to support further scale-up and spread of an effective practice, the Roadmap is uniquely suited for use in real-world settings (*Figure 10*). The data-driven evaluation plan includes an economic evaluation and business case to help transition the implementation effort to an operations partner.

Figure 10. Detailed Overview of the QUERI Implementation Roadmap

	Pre implementation	Implementation	Sustainment
What is being implemented?	Identify a problem and solution  Identify high-priority need and goals  Agree on effective practice and settings  Clarify effective practice core elements, adaptation options (Veteran, provider input)	Implement an effective practice  • Select implementation strategies  • Tailor strategies to local settings  • Disseminate implementation plan and support tools	Sustain an effective practice  Develop business plan to continue effective practice  Monitor for changes in effective practice, whether different effective practice is needed  Weigh costs of maintaining effective practice
Who and what settings are involved?	Engage stakeholders  Cultivate leadership and stakeholder support  Assess capacity, including barriers and solutions to effective practice delivery  Package effective practice with delivery adaptations	Activate implementation teams  Convey top-down practice support "push" to local sites from leadership Empower bottom-up "pull" to enhance stakeholder buy-in at local level Create stakeholder feedback channels	Transition ownership to stakeholders  • Provide management support  • Plan and budget for resources  • Support continuous learning and innovation in local stakeholder teams
How is it being measured?	Develop measures and data  Design evaluation to match goals Identify measures of success and data sources Establish baseline performance	Monitor implementation progress • Report progress to stakeholders • Make data accessible to stakeholders • Adjust plan based on feedback	<ul> <li>Ongoing evaluation and reflection</li> <li>Assess Veteran outcomes</li> <li>Evaluate delivery of effective practice (fidelity vs. adaptation)</li> <li>Measure provider and system costs</li> </ul>

Distinct features of the QUERI Implementation Roadmap:

- Facilitates a stepwise participatory approach for aligning multi-level stakeholders around common goals, data, and metrics for monitoring progress and benchmarking success.
- Demonstrates how implementation may inform future research discovery.
- Supports the deployment of promising innovations that address a time-sensitive health system priority without waiting for "perfect" evidence.
- Emphasizes sustainability, including evaluating the costs and return on investment of implementing and maintaining an effective practice over time.

A comprehensive guide for utilizing the QUERI Implementation Roadmap can be found on the QUERI website.<sup>24</sup>

#### Goal 2. Build capacity to respond quickly to national and regional developments

With new Presidential, Congressional, and VA priorities focusing on leveraging evidence, expanding access, improving price and quality transparency, and implementing High Reliability Organization principles, QUERI has an unprecedented opportunity to become a national resource for evidence in the VA.

QUERI is expanding evaluation support for these priorities and building capacity to address short-term needs. For 2021-2025, QUERI is establishing:

- **QUERI Program Rapid Response Teams** to support time-sensitive implementation and evaluation requests from national and regional VA leadership.
- QUERI Program Mentoring Core to develop the next generation of QUERI investigators.

#### Objective A. Support rapid, rigorous implementation and evaluation informing emerging health system needs

As demand for implementation and evaluation in VA continues to grow, QUERI is building teams of investigators to tackle short-term needs while expanding long-term capacity by supporting practical training opportunities for early career investigators interested in applying implementation methods to solve health system problems. The 2021-2025 QUERI Programs are designed to have a long-term outlook with moving the needle on quality of care and mentoring the next generation of QUERI investigators while also adapting and responding to emerging Veteran needs, VA priorities, and health care shifts (e.g., COVID-19).

New capacity and expertise in the 2021-2025 QUERI Programs:

- **Transdisciplinary Rapid Response Teams:** Each Program has data science, quantitative and qualitative methods, and clinical expertise ready to support emerging implementation and evaluation needs.
- Expertise in multiple implementation strategies: Each Program has expertise in at least two different implementation strategies to increase flexibility and nimbleness in responding to diverse implementation and evaluation needs.
- **Mentoring Core:** Each Program provides hands on opportunities for early career investigators to develop <u>AHRQ Learning Health System core competencies</u> and gain real-world experience working with health system leadership on time-sensitive VA challenges.

### QUERI's Response to the COVID-19 Pandemic

The unprecedented Coronavirus disease 2019 (COVID-19) pandemic has led to a significant shift in U.S. health care. Like other health systems, VHA is focused on the prevention, containment, and treatment of COVID-19. The pressing need for a rapid scalable response to this highly contagious disease **highlights the important role of implementation strategies** in ensuring the widespread, consistent uptake of best practices among frontline providers.

During the COVID-19 outbreak, QUERI investigators have been working closely with VA leadership to:

- Adapt effective practices for virtual or home delivery.
- Offer virtual implementation support and resources.
- Assess how COVID-19 is affecting Veterans.
- Provide support with COVID-19 related stress.
- Leverage data infrastructure to evaluate COVID-19 related outcomes and infection risk.

In December 2020, QUERI launched three Rapid Response Teams to help VA clinical leaders implement and evaluate rollout of the COVID-19 vaccines.

We extend a **warm thanks and gratitude** to all Veterans and their families, VA leaders, providers, and researchers, particularly QUERI clinician-investigators who are working around the clock to care for Veterans during this global health crisis.

#### Objective B. Expand capacity for ongoing implementation and evaluation support

In addition to establishing new capacity to support short-term evaluations, QUERI is expanding support for the MISSION Act, Foundations for Evidence-based Policymaking Act, and VA performance measures and reporting.

- The QUERI Partnered Evaluation Initiative (PEI) mechanism continues to be the primary pathway for rigorous multi-year evaluation of VA programs and policies. In an effort to support VA priorities related to greater choice for Veterans and the goals of the MISSION Act, QUERI has expanded the PEI mechanism to encourage partnerships with non-profit organizations and other federal agencies and increased priority funding consideration for applications proposing evaluations related to the MISSION Act. QUERI evaluations on patient safety, telehealth, and caregiver support are informing implementation of key MISSION Act requirements.
- The Partnered Evidence-based Policy Resource Center (PEPReC) has
  quickly become VA's national resource center on evidence-based policy,
  providing analytical support in identifying underserved regions and
  facilities under Sections 401-402 of the MISSION Act. In response to the
  Foundations for Evidence-based Policymaking Act, PEPReC developed
  an evidence checklist to assess the level of evidence of budget programs



an evidence checklist to assess the level of evidence of budget programs, including legislative proposals for VA, and worked with the VA Chief Strategy Office and Finance Office to provide technical assistance and input on learning agendas, evaluation prioritization, and capacity assessment.

• The Center for Evaluation and Implementation Resources (CEIR) is establishing opportunities in implementation training and consultation given the growing collaborations between QUERI and complementary VA programs, notably performance management (i.e., VA's Office of Reporting, Analytics, Performance, Improvement and Deployment Healthcare Improvement Center) and the VHA Innovation Ecosystem's Diffusion of Excellence Initiative.



## Goal 3. Deepen and expand partnerships across programs, geographic regions, and service lines

To maximize the impact of implementation initiatives, QUERI investigators partner with national, regional, and local health system leaders. These multi-level partnerships are essential for obtaining buy-in and tailoring effective practices to meet regional and local needs while ensuring alignment with national priorities, standards, and metrics.

In addition to forming new multi-level partnerships through the QUERI Programs, QUERI is deepening its partnerships with ORD services and the VHA Innovation Ecosystem.

"Multi-level partnerships between researchers and...frontline providers/staff, facility and network leaders, and [national] VHA leaders...is challenging but when it works, it is extraordinary and fun!"

-HSR&D/QUERI Investigator

One of ORD's three priorities is focused on increasing the substantial real-world impact of VA research.<sup>25</sup> QUERI is supporting this priority through the:

- **VA Research Lifecycle** brings together ORD services to coordinate activities for high-priority areas using principles of research-operations partnerships and implementation science.
- Implementation Plan Standard Operating Protocol supports implementation planning for research innovations that are shown to be effective in clinical trials funded by the <u>VA Cooperative Studies Program (CSP)</u>.

QUERI's partnership with the Diffusion of Excellence Initiative (DEI), a part of the Innovation Ecosystem, has been growing since 2016. QUERI and the DEI are continuing to work together to identify synergies and expand partnerships between QUERI investigators and Innovation Ecosystem personnel.

#### Objective A. Develop channels to accelerate research discoveries into routine care

In 2018, ORD formed the Research to Real-World (R2R) Workgroup to develop recommendations to enhance the real-world impact of research. QUERI is responsible for two of the three R2R Workgroup recommendations: the alignment of research and VA leadership priorities and the rapid deployment of implementation practice skills to researchers and clinicians to close the gap between effectiveness and routine use.

Members of the R2R Workgroup developed the VA Research Lifecycle, an integrated, systematic approach for prioritizing and translating research innovations into clinical practice within a Learning Health System context (*Figure 11*).<sup>26</sup> The Research Lifecycle promotes alignment across the translation spectrum, including biomedical device development, clinical trials, and health services research, and the strategic prioritization of national health system needs to move high priority VA-funded research into real-world settings.

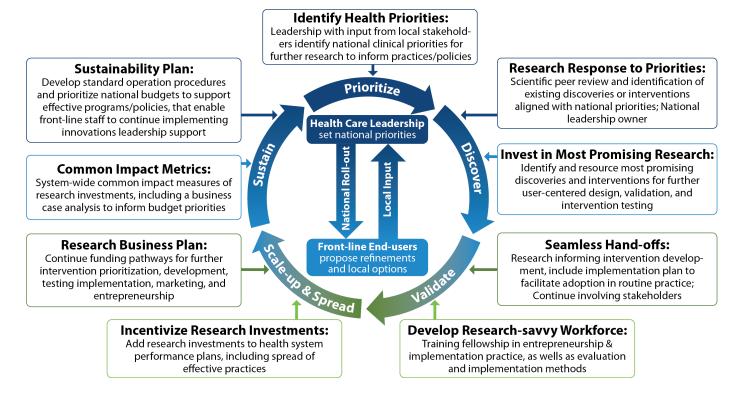


Figure 11. VA Research Lifecycle Developed by the ORD R2R Group<sup>i</sup>

The prominent focus on moving more VA research discoveries into routine care and additional attention on harmonization and coordination across research services has led QUERI to work with other ORD services to embed implementation methods across the translation spectrum in the design of research studies at all stages. In particular, ORD now requires that clinical trials funded by the <u>Cooperative Studies Program (CSP)</u>, a national clinical research infrastructure that designs and conducts multi-site clinical trials, have an implementation plan. QUERI's CEIR has been collaborating with CSP to develop a standard operating protocol based on the QUERI Implementation Roadmap. The Implementation Plan Standard Operating Protocol enhances the implementation and evaluation capacity of clinical research groups and fosters collaborations between HSR&D/QUERI investigators and CSP.



i Kilbourne AM, Braganza MZ, Bowersox NW, et al. Research Lifecycle to Increase the Substantial Real-world Impact of Research: Accelerating Innovations to Application. *Med Care*. 2019;57 Suppl 10 Suppl 3(10 Suppl 3):S206-S212

#### Objective B. Focus and align resources by partnering with the VHA Innovation Ecosystem

Comprised of the Innovators Network and Diffusion of Excellence Initiative (DEI), the <u>VHA Innovation Ecosystem</u> uses a bottom-up process to support VA employees in developing and executing their innovations. The DEI and QUERI work closely together with QUERI providing implementation, evaluation, and training support to DEI personnel, and the DEI offering marketing and other opportunities for QUERI investigators to showcase their work. Key examples appear below.

#### **Evaluation**

QUERI investigators have been supporting the Innovation Ecosystem's evaluation needs for high priority areas.

- In 2017-2018, QUERI investigator teams kicked off evaluations of the DEI and Innovators Network with goals of optimizing the programs and informing future directions.
- In 2019, QUERI's partnership expanded, resulting in three new multiyear evaluations to support implementation of DEI innovations prioritized by VA leadership for national implementation.





#### **Implementation**

- QUERI investigators are strongly encouraged to submit effective practices to the DEI to enable support for further scale-up and spread.
- In 2019, STRIDE, an inpatient walking program implemented through the Function QUERI Program, was selected as a Gold Status Practice for deployment across VA.
- The Dynamic Diffusion Network is a new 2021-2025 QUERI Program dedicated to scaling-up and spreading DEI practices that address the needs of Veterans experiencing moral pain as a result of actions taken or not taken during their service and Veterans with diabetes mellitus.



#### **Training**

All Diffusion Academy and Gold Status Practice teams have access to QUERI's resource center, CEIR, for
implementation resources and support, including facilitation of potential strategic partnerships and training
opportunities to improve the likelihood of implementation success.

## Goal 4. Drive a culture of rapid learning in support of VA's transformation to a High Reliability Organization and Learning Health System

VA's transformation to a High Reliability Organization (HRO) and Learning Health System relies on the engagement of all employees in continuously improving care and maximizing safety. To foster HRO and Learning Health System principles and support VA employees in their endeavors to improve care, QUERI is:

- Expanding implementation and QI training opportunities for VA employees.
- Establishing a new QUERI Resource Center Collaborative to provide guidance and develop resources to support VA implementation, evaluation, and training needs.

#### Objective A. Promote implementation and quality improvement strategy training opportunities

In 2018, QUERI created the QUERI

Implementation Strategy Learning Hub mechanism to support practical training for VA employees, increase VA community awareness and expertise with implementation science, and support the role of implementation science as standard aspects of VA research improvement efforts.

Offering both in-person and virtual training opportunities, the seven QUERI learning hubs span the U.S. and specialize in specific implementation and QI methods (*Figure 12*). With coordination support from QUERI's CEIR, the seven hubs provide resources, mentoring, and training support to enable VA employees to engage in improving care at their sites.

The hubs run parallel and complement the efforts of other VA training programs, notably the VA Office of Academic Affairs (OAA) Advanced Fellowships Program in Health Services Research and Development and VA Quality Scholars Program. CEIR is working closely with these OAA

Figure 12. 2020 QUERI Implementation Strategy Learning Network



programs and the Diffusion of Excellence Initiative (DEI) to match OAA and DEI fellows who are interested in implementation practice with a QUERI learning hub.

VA employees from all sites are welcome to receive free training from the QUERI learning hubs. Interested applicants can contact CEIR (ceir@va.gov) and visit the QUERI website for more details on each hub.

#### Objective B. Develop, disseminate, and coordinate HSR&D and QUERI implementation resources

In striving to become a VA enterprise resource for implementation, evaluation, and QI methods and leverage new tools and advancements in implementation science, QUERI is focusing and aligning HSR&D and QUERI resources to support current and emerging implementation, evaluation, and training needs. HSR&D and QUERI resource centers develop resources and provide technical support to help VA employees effectively leverage data, evidence, implementation strategies, economic methods, study designs, metrics, and dissemination approaches to enhance health services and implementation projects. QUERI has created the QUERI Resource Center Collaborative, which consists of both QUERI- and HSR&D-funded resource centers (*Figure 13*).



#### **OUERI** Resource Center Collaborative



HSR&D's Evidence Synthesis Program (ESP) Assess evidence QUERI's Center for Evaluation & Implementation Resources (CEIR) Identify optimal implementation approach HSR&D's Health Economics Resource Center (HERC)

Develop cost assessment methods and resources QUERI's Partnered Evidence-based Policy Resource Center (PEPReC) Support use of rigorous practical evaluation designs

and metrics

HSR&D's Center for Information Dissemination and Education Resources (CIDER) Disseminate research findings

HSR&D's VA Information Resource Center (VIReC) Support effective use of VA data resources

The QUERI Resource Center Collaborative serves as a VA-wide strategic action and learning group to support VA operations and research stakeholders in enterprise-wide implementation, evaluation, dissemination, and sustainment efforts.

- <u>Evidence Synthesis Program (ESP)</u> systematically reviews research evidence and identifies effective practices that address key VA challenges and emerging Veteran needs.
  - Resources: high quality published reports and systematic reviews
- <u>CEIR</u> connects VA users with resources, guidance, and potential partners to support development of implementation and evaluation plans in VA.
  - Resources: <u>Implementation Research Group Cyberseminars and working group products</u>, <u>QUERI Implementation Roadmap Guide</u>, <u>Evaluation Guide</u>, <u>Implementation Science and Quality Improvement Resource Matrix</u>
- <u>Health Economics Resource Center (HERC)</u> develops resources, tools, and working groups for economic evaluations and provides consultations on economic methods.
  - Resources: <u>Detailed Guidance on Conducting Economic Analyses for Implementation Research</u>
- <u>PEPReC</u> provides analytical support for time-sensitive VA policy and management initiatives, informing the implementation of major legislative priorities (e.g., MISSION Act, Foundations for Evidence-based Policymaking Act) in VA, and consultation on randomized evaluation study designs and VA metrics (e.g., wait time).
  - Resources: Policy Briefs, Writing for Reach: Communicating Scholarly Results to General Audiences Cyberseminar
- Center for Information Dissemination and Education Resources (CIDER) disseminates QUERI results and impacts through the <u>QUERI website</u>, <u>e-newsletters</u>, VA exhibit tables, and <u>Cyberseminars</u>.
  - Resources: <u>Cyberseminar Archive</u>
- <u>VA Information Resource Center (VIReC)</u> provides investigators with resources to help effectively understand, access, and use VA data. As the VA transitions to the Cerner electronic health record (EHR), VIReC plays a key role in ensuring that investigators continue to have access and understanding of data generated by the new system.
  - Resources: Quick Guide: Resources for Using VA Data, Data Issues Brief, Database & Methods Cyberseminar Series, Partnered Research Cyberseminar Series





HSR&D/QUERI resource centers are developing tailored resources to support new efforts as part of the 2021-2025 QUERI Strategic Plan, including:

- Timely sharing of best practices. CEIR's Implementation Research Group, a national learning collaborative comprised of more than 500 members, focuses on promoting collaborations and sharing strategies and lessons learned across major areas in implementation science. The topics of the Implementation Research Group pivot to keep pace with emerging health system issues and advancements in implementation science, including cultural and organizational adaptations; external, internal, and virtual facilitation; formative evaluation; rapid qualitative analysis and immediate feedback loops to clinical teams; Qualitative Comparative Analysis (QCA); and Configurational Comparative Methods (CNA). For example, the Implementation Research Group developed a virtual methods collaborative to support the swift transition from in-person activities to virtual approaches in response to COVID-19 safety concerns.
- Economic methods for implementation work. Measuring the cost of implementation efforts is crucial for informing future policy and program decisions, yet economic methods for implementation science are lacking. As part of QUERI's new emphasis on assessing costs and developing a business case, HERC is leading efforts to identify best practices for economic evaluations in implementation science with a unique focus on understanding effective practice and implementation strategy costs from the perspective of the health system and key decision makers. <sup>27-29</sup> In collaboration with CEIR, HERC is facilitating the Cost and Implementation Workgroup, which is comprised of more than 70 VA and external stakeholders across the nation. With support from QUERI and the National Cancer Institute, the Workgroup is sharing economic evaluation methods and developing a series of papers for a special supplement to *Implementation Science*.

#### Goal 5. Empower employees to move the needle on quality of care

Along with providing technical support and resources, QUERI is striving to empower VA employees to make a significant impact on quality of care and ultimately improve the health of all Veterans and their families by:

- Benchmarking QUERI progress using health system and Veteran-centered metrics instead of solely traditional research measures.
- Cultivating QUERI teams representing diverse backgrounds and perspectives.
- Continuing to support the QUERI-VISN Partnered Implementation Initiatives (PIIs) that strive to improve quality of care for top clinical priorities.

#### Objective A. Benchmark using health system and Veteran-centered metrics

Going beyond traditional research metrics (e.g., publications, conference presentations, project completion) and assessing impacts on the health system, VA employees, and Veterans is crucial to ensuring implementation and QI investments lead to sustained improvements in health care and Veteran outcomes. To understand the benefits and value of QUERI investments and promote greater alignment between investigators and their clinical and operations partners, QUERI developed the QUERI Impact Framework as a comprehensive approach to measure the overall health, economic, policy, and cultural impacts of QUERI activities.<sup>30</sup>

The cross-cutting metrics in the QUERI Impact Framework reflect QUERI's three-fold strategic methodology across five domains of impact (Alignment, Commitment, Tailoring, Informing the field, Observing healthcare changes, and generating New questions/projects or ACTION) (*Table 1*).

Table 1. Summary of QUERI Impact Framework

Domain	Measures
<b>A</b> lignment	Relevant priorities, metrics, partners
<b>C</b> ommitment	Shared operational resources and financial support, scientific tools and strategies
<b>T</b> ailoring to local context	Implementation sites and providers using effective practice, Veterans served
Informing the field	Decision-maker meetings and Congressional hearings, peer-reviewed publications, scale- up and spread beyond initial sites
<b>O</b> bserving healthcare change and generating <b>N</b> ew projects	Sustainability, policies and clinical practices informed/shaped, tangible improvements in quality of care and health outcomes, cultural changes in provider engagement and new project requests

Expanding on metrics from the National Academy of Medicine and incorporating lessons learned from 2021-2025 strategic planning, the QUERI Impact Framework includes proximate impact metrics (e.g., number of Veterans served with a focus on underserved populations, number of implementation sites particularly sites experiencing quality gaps, number of VA staff trained), derived directly from VHA performance plan goals, as well as more distal impacts (e.g., long-term changes in quality of care, policy, and culture across the health system) (*Table 2*).

Along with the QUERI Implementation Roadmap, the QUERI Impact Framework is designed to guide QUERI implementation efforts, promoting a shared understanding of vision, goals, and metrics across key stakeholders. The progress of all QUERI implementation efforts, including QUERI Programs and QUERI-VISN PIIs, will be benchmarked using this Framework.

Table 2. Detailed Overview of QUERI Impact Frameworkii

	Table 2. Detailed Overview of QUERTITIPACT Framework		
Domain and Degrees of Impact	Potential Indicators		
Alignment with Multi-Level Priorities: How is the initiative directly linked to health system operations and research priorities?	<ul> <li>1a. Research Priorities         Research priority being addressed*; Number of research innovations implemented in routine care; Number of in-house research innovations implemented in routine care     </li> <li>1b. Health System Operations Priorities         Health system priority being addressed*; Identified metrics derived from priorities and health system goals*; Total number of distinct partners; Scope and depth of partnerships*     </li> </ul>		
Commitment: How effective is the research-operations partnership?	<ol> <li>Administrative Research and Operations Resources         Amount of funding provided by partners; Non-monetary resources contributed by partners*; Description of how these resources support shared goals*     </li> <li>Investigator-developed Tools &amp; Strategies         Type of implementation strategy used*; Innovations to implementation strategy for sites that have quality gaps in clinical area being addressed*; Evaluation design to examine strategy or compare the effectiveness of two implementation strategies (e.g., randomized stepped wedge)*; Approach to continuous learning and improvement throughout implementation process*; Number and type* of products developed; Number of patents awarded     </li> </ol>		
Tailoring to local context: To what extent were specific strategies and tools adopted into routine practice?	4. Direct Proximate Impacts Number and type* of implementation sites; Number and type* of implementation sites that have quality gaps in clinical area being addressed; Number of VA staff trained and/or using effective practices; Number of Veterans/family members/caregivers served by effective practices		
Informing the field: How are results being communicated to key stakeholders and organizations?	<ul> <li>5a. Extent to which results were disseminated to health system leadership and other operations stakeholders         Description of briefings/presentations to health system leadership and other key stakeholders with decision-making or financial authority*     </li> <li>5b. Extent to which results were disseminated to research stakeholders         Number of published journal articles; Number of conference presentations; List of citations     </li> <li>5c. Extent to which results were disseminated externally to the public         Number of articles published on national media outlets; Number of mentions in social media     </li> <li>6. Extent to which there was additional scale-up and spread beyond original implementation sites         Additional resources to scale-up and spread effective practices*; Number of additional sites implementing effective practices/tools/strategies (beyond the original sites that were directly part of the initial implementation effort)     </li> </ul>		
Observing healthcare changes and generating New questions & projects: What improvements in quality of care and health outcomes, policy, and/or culture were observed? Were new analyses/projects launched as a result of the effort?	<ol> <li>Sustainability         <ul> <li>Understanding costs in the short- and long-run, enabling an understanding on return on investment (ROI) and value to the VA and society</li> </ul> </li> <li>Quality of Care and Health Outcomes         <ul> <li>Health outcomes of patients*; Quality of care metrics*</li> </ul> </li> <li>Policy         <ul> <li>Number of citations in clinical guidelines; Number of citations in policy documents</li> </ul> </li> <li>Culture         <ul> <li>Observed changes in provider engagement*; Number and range* of new quality enhancement projects or evaluation analyses launched or expanded</li> </ul> </li> </ol>		

<sup>\*</sup>Qualitative metric

<sup>&</sup>quot;Braganza MZ, Kilbourne AM. The Quality Enhancement Research Initiative (QUERI) Impact Framework: Measuring the Realworld Impact of Implementation Science. *J GEN INTERN MED*. 2020. https://doi.org/10.1007/s11606-020-06143-z



#### Objective B. Cultivate QUERI teams representing diverse perspectives

One of QUERI's core values is commitment—commitment to ensuring that all QUERI employees feel respected, valued, and connected. We want to foster teams reflecting a variety of backgrounds and experiences and create an environment where all employees have an equal opportunity to fully utilize their talents to make a meaningful impact on health care.

To further this goal, QUERI is:

- Striving to recruit a diverse group of implementation science leaders that represent a variety of backgrounds and perspectives.
- Creating mentorship opportunities through the national network of QUERI Program Mentoring Cores.
- Continuing promotion of the Implementation Strategy Learning Hubs.
- Integrating health equity as a core component to implementation science initiatives.

### **Conclusion**

Shaped by feedback from 150+ diverse stakeholders, the Strategic Plan provides an action plan for implementing QUERI's priorities at the frontline level. QUERI updates its Strategic Plan every five years, and as a living document, it is reviewed and refreshed annually to ensure QUERI efforts are aligned with emerging Congressional and VA priorities, changing Veteran needs, and advancements in health services research and implementation science.

We want to thank all QUERI investigators and support staff, providers, research and COIN staff, and partners who work tirelessly to improve the care provided to Veterans. We look forward to continuing working with you as we strive to help Veterans and their families live the healthiest lives possible!

#### Summary of 2021-2025 QUERI Strategic Plan

#### **MISSION AND VISION**

#### Improve Veteran health by accelerating evidence into practice

Become a trusted purveyor of evidence, implementation, and quality improvement methods across VA, supporting frontline providers in deploying effective practices that transform Veteran care

#### **GOALS**

- 1. Reduce unwanted clinical and service variation across VA.
- 2. Build capacity to respond quickly to national and regional developments.
- 3. Deepen and expand partnerships across programs, geographic regions, and service lines.
- 4. Drive a culture of rapid learning in support of VA's transformation to a High Reliability Organization and Learning Health System.
- 5. Empower employees to move the needle on quality of care.

#### STRATEGIC METHODOLOGY

#### 1. Implement

#### 2. Evaluate

#### 3. Disseminate and Sustain

#### **INITIATIVES**

National scale-up and spread of effective practices – QUERI Program Centers



Rapid regional and local tailored implementation of effective practices – QUERI-VISN Partnered Implementation Initiatives (PIIs)

National and regional evaluations to **optimize** programs and policies affecting Veterans – QUERI Partnered Evaluation Initiatives (PEIs)



Development of **business case**, including cost evaluations – QUERI Programs and QUERI- VISN PIIs



Promoting **data-driven** culture and **rapid learning** – QUERI Implementation Strategy Learning Hubs



#### **KEY INDICATORS**

- 1. # effective practices implemented
- # effective practices derived from VA research implemented
- # distinct partners across geographical areas and service lines
- 4. # products developed
- 5. # and type of sites implementing effective practices
- 6. # and type of sites with quality gaps implementing effective practices
- 7. # VA staff trained in effective practices or number of VA staff no longer using low-value approach (for de-implementation)
- 8. # Veterans served by effective practices
- 9. # diverse Veteran populations served by effective practices

- 10. # national and regional level evaluations
- 11. operations partner funding commitment
- 12. tangible operations resources provided
- 13. degree in which findings directly lead to the creation or improvement of policy or clinical practice guidelines and/or were used to inform U.S. government testimony or panel meetings of national organizations
- 14. active participation of QUERI investigators in the implementation and evaluation of national and regional priorities as directed by VA leadership

- 15. # published journal articles
- 16. # conference presentations
- 17. briefings held in which goals or results were directly presented to individuals with decision-making or financial authority
- 18. development of business plan with estimated costs of implementing effective practices
- # additional sites implementing effective practices beyond the sites that were directly part of the initial implementation effort
- 20. whether VA policies or programs were developed or shaped because of QUERI input
- maintenance of effective practice performance once initial implementation efforts wane (e.g., transition to locally-owned "sustainment" phase)



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#### **Reviewers**

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## **Appendix**

#### **Key Acronyms and Definitions**

**CEIR:** Center for Evaluation and Implementation Resources identifies optimal implementation strategies for specific implementation efforts and connects VA users with resources, guidance, and potential partners to support development of implementation and evaluation plans in VA.

**CIDER:** Center for Information Dissemination and Education Resources disseminates research findings to operations and research stakeholders.

**CSP:** Cooperative Studies Program, an ORD program, is a national clinical research infrastructure that designs and conducts multi-site clinical trials.

**COIN**: Centers of Innovation are HSR&D's field-based centers focused on health services research.

**Effective practice:** An evidence-based or promising innovation, intervention, program, policy, or practice.

EHR: Electronic Health Record.

**ESP:** Evidence Synthesis Program systematically reviews research evidence and identifies effective practices that address key VA challenges and emerging Veteran needs.

**HERC:** Health Economics Resource Center develops resources, tools, and collaboratives for economic evaluations and provides consultations on economic methods.

**HSR&D:** Health Services Research & Development, an ORD research service, focuses on improving the quality and delivery of health care through research.

**ORD:** Office of Research & Development, embedded in VA, is comprised of four research services and several programs that span the full translation spectrum.

**QI:** Quality improvement

**QUERI:** Quality Enhancement Research Initiative, an HSR&D program, aims to improve the health of Veterans by using implementation and QI methods to accelerate the uptake of evidence into clinical practice.

**PEPReC:** Partnered Evidence-based Policy Resource Center provides analytical support for time-sensitive VA policy and management initiatives.

VHA: Veterans Health Administration.

**VIReC:** VA Information Resource Center provides resources to guide VA investigators to promote effective use of data.

**VISN:** Veterans Integrated Service Network is the regional system that provides health care and other services for Veterans.

#### **Key Legislative and VA Priorities**

#### **Congressional and Presidential Priorities**

<u>VA Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act of 2018</u> is designed to expand health care access for Veterans, increase caregiver benefits, and strengthen VA's efforts around provider recruitment and retainment.

<u>Foundations for Evidence-Based Policymaking Act of 2018</u> seeks to improve how data is used to generate evidence about policies and programs across cabinet-level federal agencies.

Federal Response to COVID-19, Coronavirus Aid, Relief, and Economic Security (CARES) Act, and Families First Coronavirus Response Act highlight the importance of disaster preparedness and include expanded VA authorities and efforts to support infrastructure and activities related to the prevention, containment, and treatment of COVID-19, including telehealth capabilities, provider overtime and housing in high-risk areas, and IT.

<u>Cmdr. John Scott Hannon Veterans Mental Health Care Improvement Act (Hannon Act)</u> calls for VA to improve mental health care, suicide prevention services, and transition assistance for Veterans.

<u>Comprehensive Addiction and Recovery Act (CARA) of 2016</u> lays out a comprehensive strategy to address the opioid and heroin misuse and overdose epidemic.

<u>The President's Roadmap to Empower Veterans and End the National Tragedy of Suicide (PREVENTS)</u> is focused on the development of a comprehensive multi-level strategy to reduce suicides among Veterans.

<u>21st Century Cures Act</u> emphasizes the use of real-world evidence, especially from electronic health records (EHR) and other electronic data sources, to assess the real-world impacts of new treatments, practices, and implementation strategies that improve population health.

<u>Executive Order on Improving Price and Quality Transparency</u> promotes price transparency and quality reporting across all health care settings.

#### **National VA Priorities**

#### VA Priorities (e.g., enhancing care and services for underserved and vulnerable Veterans)

- Customer Service
- MISSION Act
- Business Transformation
- Electronic Health Record Modernization

#### VHA Long-Range Goals (2020-2024):

- 1. Restore Trust: Make VHA the provider and care coordinator of choice for Veterans
- 2. Deliver comprehensive and integrated whole health care
- 3. Innovate as a learning and teaching organization
- 4. Increase the efficient and effective use of resources across the enterprise

Under VHA Goal 3: Innovate as a Learning and Teaching Organization, VHA leverages QUERI to inform knowledge translation to integrate and leverage best practices and technological advances in health care into education and clinical practice

<u>Enterprise-wide High Reliability Organization (HRO)</u> improves safety and minimizes harm to Veterans through applying similar principles and procedures that have been effective in nuclear and airline industries across the VA.

<u>Electronic Health Record Modernization (EHRM) Initiative</u> enhances interoperability across the VA, the Department of Defense (DOD), and community care providers and enables the secure transfer of active duty transitioning service members' health data through a phased multi-year national rollout of Cerner Millennium to replace the VA's homegrown EHR.

#### VHA Ten Lanes of Effort Supporting Modernization Priorities (2020)

- 1. Commit to zero harm
- 2. Streamline VHA Central Office (VHACO) organization
- 3. Reduce unwarranted variation across integrated clinical and operational service lines
- 4. Deliver 21st century whole health and mental health programs
- 5. Revise governance processes and align decision rights, starting with VAMCs, continuing with VISNs, and finishing with VHACO
- 6. Develop responsive shared services
- 7. Implement the VA MISSON Act
- 8. Modernize EHR
- 9. Transform financial management system
- 10. Transform supply chain

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Many thanks to our QUERI National Stakeholder group, whose timeless support and strategic insights have been invaluable!

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