

COMMENTARY

Quality Enhancement Research Initiative Rapid Response Teams: A learning health system approach to addressing emerging health system challenges

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1 | INTRODUCTION

As the healthcare landscape continues to evolve, research has a crucial role in helping to inform health system efforts to provide more efficient, consumer-centered care. The Learning Health System Framework provides a vision of how the research enterprise can synergize with health system operations by systematically generating and integrating research evidence with performance data and applying this knowledge to address complex policy challenges and drive sustained care improvements across the health system.^{1,2} Yet, research processes and timelines remain inefficient and misaligned with health system priorities and needs. Research and operations often operate under different priorities, goals, timelines, and metrics, and addressing these inherent tensions is essential to realizing Learning Health System goals and enhancing the real-world impact of research.^{3,4} Making research more timely and responsive to health system, provider, and consumer needs requires engaging vested partners early on to align research and health system priorities and goals and streamline research through greater utilization of pragmatic research designs, improved research infrastructures, and accelerated peer review processes.^{4,5}

The Department of Veterans Affairs (VA) Quality Enhancement Research Initiative (QUERI) was established in 1998 as a knowledge

translation program under the VA Office of Research and Development to help counter tensions between research and operations. The mission of QUERI is to accelerate the uptake of evidence across the organization with the ultimate goal of improving the quality of care for US Military Veterans, their families, and their caregivers. QUERI funds more than 400 investigators and staff embedded in VA care facilities across the United States to partner with multilevel leaders, policymakers, managers, providers, and other frontline staff to implement effective practices, programs, and policies. As a bridge between operations and research, QUERI strives to support VA's transformation to a Learning Health System through identifying health system priorities using an innovative enterprise-wide process and embedding these priorities in its partnered funding opportunities, to help align QUERI implementation, evaluation, and quality improvement initiatives with VA performance goals.^{6,7} These operations-driven evaluations have informed the rollout of more than 80 national and regional programs/policies to help make them work at the clinic level for providers and Veterans. While these initiatives have been largely successful, they have relied on traditional research-based peer review processes that can result in a six month or longer lag time from project inception to funding. In response to operations leader requests for more rapid mechanisms for garnering evaluation support, QUERI launched the Rapid Response Team (RRT) process in October

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2020. This commentary describes QUERI's RRT process, which seeks to decrease the timeline for project submission, peer review, and funder approval to less than 1 month.

2 | OVERVIEW OF THE QUALITY ENHANCEMENT RESEARCH INITIATIVE RAPID RESPONSE TEAM PROCESS

QUERI's RRT process deploys implementation, evaluation, and quality improvement expertise, strategies, and tools to address national and regional developments.⁸ Guided by the Learning Health System Framework and QUERI Implementation Roadmap, the RRT process involves identifying an emerging health system problem, designing and implementing a plan to address the problem, and disseminating the results to partners and impacted groups to enhance the uptake of an effective program/policy and foster more real-time, evidence-based clinical and policy decision-making.⁹ RRTs provide support to help optimize a program/policy for Veterans Integrated Services Network-wide (VISN, i.e., regional health system) or national implementation.

RRTs are interdisciplinary teams consisting of investigators, healthcare providers, and support staff with experience in carrying out implementation, evaluation, and/or quality improvement methods to address operations-driven initiatives. These QUERI-funded teams have expertise in mixed methods (qualitative and quantitative expertise) and experience with VA data (e.g., VA national Electronic Health Record and administrative database management and analyses). Currently, there are 13 RRTs, embedded within QUERI Program centers. These centers, which underwent peer-review by a scientific merit review panel, are supporting the scale-up, spread, and sustainment of evidence-based and promising practices that address a VA priority (e.g., expanding Veteran access to care through virtual care).

The QUERI RRT process is a novel Learning Health System approach for aligning research expertise, methods, and tools to help address time-sensitive challenges and opportunities in a national integrated health system. The six-step RRT process begins with identifying implementation planning, evaluation, and training projects that are aligned with time-sensitive priorities and meet implementation readiness criteria. These projects are then routed to RRTs to work closely with operations partners to complete these projects and disseminate findings to enhance the uptake of the program/policy.

2.1 | Step 1: problem identification

Following the learning cycle, the RRT process begins with identifying an emerging priority. QUERI gathers time-sensitive implementation planning, evaluation, and training needs directly from VA clinical, strategy, and financial leaders—hereafter referred to as operations leaders—using a web-based form. The form captures information about the proposed project's alignment with current VA priorities, the problem and who is affected, the proposed policy/program that could be used to solve the problem, and potential

outcomes and measures of success for the project, including a “definition of done.” The intake form is designed for operations leaders to submit their requests; however, if an operations leader is working with a QUERI team on a different project, the operations partner and QUERI team may begin conversations about the proposed project. In these cases, the RRT and operations partner can jointly submit the request.

2.2 | Step 2: subject matter expert review

When a request is submitted, VA investigators with expertise in implementation science, evaluation, data, economics, and policy assess the submission using the following criteria: (1) the degree to which the request reflects current VA priorities; (2) the importance to Veteran care and the level of evidence supporting the program/policy; (3) the potential for impact; (4) the rigor of the proposed work; (5) its complementarity (and non-redundancy) with other ongoing initiatives; (6) the feasibility of completing the proposed work in a 3- to 9-month time frame; (7) the level of engagement of the operations partner; (8) a clear “definition of done,” including a plan to use the results of the project, a mechanism to implement project findings, and an owner of the results. Submissions that meet RRT project criteria and are aligned with time-sensitive VA priorities are approved by the QUERI National Program Office and routed to an RRT. If a request does not appear to align with RRT project criteria, the submitter is notified and offered a brief telephone consultation to help identify relevant resources and potential mechanisms for support.

In 2023, 25 requests were received from operations leaders representing 17 distinct service lines or healthcare areas (e.g., primary and specialty care, geriatrics) or regional service networks (e.g., VISN 5), and 20 requests were approved and routed to RRTs. These approved projects address a range of priorities, such as antimicrobial stewardship, mental health and suicide prevention, provider burnout, Veteran access to care, chronic pain and opioid use disorder, and legislative mandates, and several focus on the needs of high priority populations, including older adults, homelessness-experienced Veterans, women Veterans, and Veterans residing in rural areas.

2.3 | Step 3: matchmaking

Approved requests are assigned to an RRT based on the QUERI Program center's methods and clinical topic expertise, availability, and interest. Where possible, RRT projects are matched with QUERI Program centers that have existing collaborations with the operations partner. RRTs have the capacity to support 1–2 implementation, evaluation, and/or training requests at any point during the fiscal year. When the RRT receives a new project assignment, the RRT reviews the request and reaches out to the operations partner to develop a plan. Recent examples of RRT projects include a mixed methods evaluation of the Veteran reach, effectiveness (e.g., ED transfer rates), site adoption, and barriers and enablers for the implementation of the VA

TeleStroke inpatient consultation for nonacute stroke at 11 VA Medical Centers, and a qualitative assessment to inform the implementation of a national childcare assistance program in response to the Johnny Isakson and David P. Roe, MD Veterans Health Care and Benefits Improvement Act of 2020 (US Public Law (PL) 116-315; Title V Deborah Sampson Act, Section 5107(a)).¹⁰

2.4 | Step 4: development of a plan

The RRT works with the operations partner who submitted the request to design a plan and address any major comments from the subject matter expert review. During this process, the operations partner and RRT specify their responsibilities (e.g., regular operations partner feedback on the progress of the project, RRT rapid qualitative analysis). Depending on the scope of the project, the operations partner may commit additional funding or resources (e.g., data access, personnel time) that are vital to the success of the project.

A memorandum of understanding (MOU) is used to facilitate this process, and this document summarizes the problem to be addressed, the project goals and approach, metrics for benchmarking progress, and anticipated milestones and products and outlines meeting cadences, project personnel, and planned dissemination activities. Moreover, the MOU describes how the RRT project is designed for quality improvement purposes and supports VA internal implementation and evaluation efforts. Prior to operations partner, RRT project lead and QUERI National Program Office leadership sign off, QUERI staff review the MOU for clarity and best practices based on lessons learned from other QUERI partnered evaluations.¹¹

2.5 | Step 5: implementation

Once the MOU is finalized and signed, the RRT works closely with the operations partner to implement the plan. RRT projects vary in their methods and the level of personnel effort, depending on the project scope and timeline. An example of a 3-month project involved 20% of the lead investigator's time and 20% of a quantitative data analyst's time to develop a national survey, analyze the survey data, and summarize the findings in a report. A 9-month RRT project required 20% of the lead investigator's time, 10% of the qualitative analyst's time, 25% effort across two project coordinators, and 25% of a research assistant's time to conduct interviews at two different time points across 10 sites.

The RRT provides updates and shares interim findings with their operations partner according to the approach outlined in the MOU (e.g., biweekly meetings, monthly email updates). Key RRT project activities, findings, and impacts are communicated to the QUERI National Program Office as part of the overall QUERI Program center biannual reporting requirements. Report questions are based on the QUERI (ACTION) Impact Framework, which supports a comprehensive assessment of the impact of implementation, evaluation, and

quality improvement initiatives on providers and other frontline staff, Veterans, and the health system.¹² RRT report data, intake form information (Step 1), and reviewer comments (Step 2) are collected and managed using REDCap electronic data capture tools hosted at the VHA. REDCap (Research Electronic Data Capture) is a secure, web-based application designed to support data capture for research studies, providing (1) an intuitive interface for validated data entry; (2) audit trails for tracking data manipulation and export procedures; (3) automated export procedures for seamless data downloads to common statistical packages; and (4) procedures for importing data from external sources.^{13,14}

2.6 | Step 6: dissemination

RRTs develop products, such as dashboards, evaluation plans, and infographics, to support national dissemination of programs/policies. In addition, RRTs share the results and impacts of their projects outside of the VA through journal publications, webinars, and conferences.¹⁵⁻¹⁷

While RRT projects are designed to provide short-term support, several have led to longer-term partnerships with the operations partner. For example, an RRT project focused on developing a robust evaluation plan for a Congressionally mandated program designed to expand legal services for Veterans experiencing or at risk for homelessness led to additional funding through QUERI and the VA Homeless Programs Office to execute the three-year evaluation to assess the outcomes (e.g., number of Veterans served by the program), barriers and facilitators, and costs and benefits of program implementation.¹⁸

3 | DISCUSSION

QUERI's novel RRT model is a practical, flexible approach for deploying implementation, evaluation, and quality improvement expertise, methods, and tools to address emerging health system priorities in a large, integrated national health system. Grounded in the Learning Health System Framework with an emphasis on partner engagement, the RRT model utilizes an accelerated review timeline to enable interdisciplinary teams to jumpstart evaluation work and support the implementation of a program/policy more quickly than typical research timelines.

The RRT process aims to make research more timely, responsive, and relevant by engaging partners throughout the course of the project—from design development to the execution of the project—and encouraging rapid, pragmatic evaluation designs.^{5,19} The MOU helps to overcome many of the inherent tensions between research and operations by fostering alignment around shared goals, milestones, and products.⁴ The RRT model allows investigator teams to be nimble and provide a range of support, from creating an evaluation plan that helps an organization comply with a legislative mandate to

participating in a workgroup to develop communication strategies for future emergency planning. Some RRT projects led to longer-term partnerships with operations partners providing co-funding and other resources to continue evaluation support for these initiatives.

A key strength of the QUERI RRT approach is that RRTs are embedded in QUERI Program centers, which have a broad array of clinical topic, methods, and data expertise to address a range of RRT requests. The centers encompass both long-term implementation work and operations-driven RRT projects, which helps balance investigator interests and VA operational needs. The five-year center funding cycle is crucial to ensuring the stability and bandwidth for RRTs to take on quick turnaround projects. Furthermore, the centers partner with multilevel operations leaders, and these partnerships can help establish trust and facilitate the initiation and completion of projects.

The RRT process is continuously evolving based on feedback from operations leaders and QUERI teams. Engaging partners early and often to gather input and feedback and sharing interim results in a timely manner has been essential for promoting productive, bidirectional partnerships between QUERI teams and operations leaders. In addition, defining the project scope, timeline, and deliverables and ensuring the proposed work is right sized for an RRT from the outset is key to the success of an RRT project. To support the uptake of these lessons learned from RRT projects, the MOU template has been regularly updated (e.g., inclusion of meeting cadences, timeline for sharing interim results, list of personnel and effort), and an RRT checklist was created and disseminated to guide RRTs in the development of their own internal processes. At the request of QUERI investigators, a knowledge sharing forum was launched to bring together QUERI Program center investigators and staff to share their experiences and learn from each other. For example, in the first meeting, center leads shared their processes for staffing RRT projects.

Over the last 10 years, QUERI has taken a more problem-focused approach to innovation and improvement, evolving its strategic goals, initiatives, and metrics to better align with national priorities and Learning Health System goals. The QUERI RRT process is the first step to implementing a more rapid Learning Health System in the VA, and this approach can serve as an example of how to quickly deploy research expertise to address emerging priorities and help close the gap between research and clinical practice.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

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