Virtual Specialty Care: Implementing and Evaluating Technology-Facilitated Clinical Interventions to Improve Access to High-Quality Specialty Care for Rural Veterans

Overview

The VA healthcare system provides care to 3.3 million Veterans living in rural areas, comprising 36% of all VA enrollees. In 1995, VA began expanding its system of community-based outpatient clinics (CBOCs) in order to improve access for the geographically dispersed Veteran population. There are now approximately 900 CBOCs delivering a range of services to about 64% of VA enrollees. While these CBOCs have dramatically improved access, it has been challenging to deliver specialty care to rural Veterans. Evidence-based specialty care practices developed for large VA medical centers are often not feasible to deploy in small CBOCs, and thus not accessible to rural Veterans. This QUERI Program will work to implement and evaluate technology-facilitated clinical interventions designed to improve outcomes for rural Veterans.

The goal of this QUERI program is to implement and evaluate promising clinical practices incorporating virtual care technologies in order to improve access to high-quality care for Veterans residing in rural settings. To achieve this goal, the Virtual Specialty Care QUERI has three specific aims:

• Develop, evaluate, and refine implementation strategies to roll out promising clinical practices that incorporate various virtual care technologies, e.g., telehealth, eHealth, and mHealth (mobile health);
• Evaluate and refine promising clinical practices that incorporate virtual care technologies—developed at VA Rural Resource Centers and elsewhere—that are designed to improve access to high-quality care for rural Veterans; and
• Measure implementation costs and assess the budget impact for operational partners.

Implementation Strategy

Projects will compare low-resource facilitation strategies to high-resource facilitation strategies. The low-resource strategy (similar to standard VA rollout strategies) includes: funding for hiring new personnel, internal facilitators, operational manuals, resource guides and toolkits, training, and technical support. The high-resource strategy that targets provider adoption uses external facilitation in conjunction with systems redesign methodologies, such as clinical workflow mapping. The high-resource strategy targeting Veteran uptake uses social marketing strategies.
Project Summaries

- **Project 1.** This multi-site project will compare low-resource strategies to high-resource strategies to promote the adoption of an evidence-based practice targeting patients with PTSD who are served in Community-Based Outpatient Clinics (Telemedicine Outreach for PTSD). The project will use an adaptive implementation strategy with a stepped-wedge design to evaluate reach into the patient population, provider adoption, and treatment effectiveness. Both implementation and clinical costs will be assessed.

- **Project 2.** This multi-site project will compare low-resource strategies to high-resource strategies to promote the uptake of electronic exchange of health information by dual use Veterans. Electronic exchange of health information between VA and non-VA providers is critical to care coordination. The project will use a sequential pre-post design to evaluate Veterans’ uptake of electronic exchange of health information, and changes in perceptions of care coordination. Both implementation and clinical costs will be assessed.

- **Project 3.** Investigators on this project used a high-resource strategy to promote the integration of clinical video telehealth to home (CVT-H) technology into Home-Based Cardiac Rehabilitation to help treat Veterans who live far away from VA medical centers. The project demonstrated proof of concept and has led to limited use of CVT-H by early adopters at VA medical centers implementing Home-Based Cardiac Rehabilitation as part of the Office of Rural Health’s Promising Practices program.

- **Project 4.** Investigators on this project will use high-resource strategies to promote the full-featured adoption of the Prolonged Exposure (PE) therapy smartphone app ‘PE Coach’ by therapists and patients. Therapist and patient uptake will be evaluated.

- **Project 5.** This project will pilot the use of a patient smartphone app for Home-Based Cardiac Rehabilitation. The VA FitHeart app was developed in partnership with the Office of Connected Care. Investigators on this project will identify barriers and facilitators to the use of VA FitHeart for home cardiac rehabilitation and determine its usability.

- **Project 6.** The Tele-ICU project is funded by the Office of Rural Health and is designated as one of their Critical Rural Access Solutions. The evaluation of the multisite Tele-ICU implementation initiative uses a pre-post study design to evaluate the implementation strategies that are currently being used to roll out Tele-ICU to intensive care units in small VA medical centers.

**Program Leadership**
John Fortney, PhD (Corresponding PI)
John.Fortney@va.gov
Heather Reisinger, PhD, Implementation Scientist
Michael Ohl, MD, Medical Director

**Principal Operational Partners**
- Office of Rural Health
- Office of Connected Care
- Mental Health Services

**For More Information**
For general QUERI information, contact QUERI Program Manager Melissa Braganza, MPH, via email at Melissa.Braganza@va.gov.

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