National Program Network

PRIS-M: Precision Monitoring to Transform Care
Indianapolis, IN San Francisco, CA

Overview

VA is unquestionably a leader in the use of electronic health record (EHR) data to inform clinical, operational, and administrative decisions. Despite growing accessibility, data are most commonly used to retrospectively evaluate quality of care rather than to provide the right data at the right time to the right person in a way that increases patient and staff satisfaction—and improves healthcare.

The Precision Monitoring (PRIS-M) to Transform Care QUERI program aims to:

- Implement and evaluate electronic clinical quality measures (eCQMs) and decision support tools at the point-of-care;
- Conduct scalable clinical quality improvement projects that link electronic data to provider actions and reporting;
- Investigate the effects of providing actionable EHR-based data on both Veterans’ and care teams’ behaviors and satisfaction; and
- Identify implementation strategies and contextual factors that assist VA providers, leaders, and Veterans in using data to transform care.

Investigators will address important implementation questions about how best to use data to help providers, healthcare teams, and Veterans to improve healthcare delivery and outcomes.

Implementation Strategy

The overarching implementation strategy is to activate individuals and groups to use data to transform care. The implementation core includes implementation, data, and usability scientists and focuses on three implementation goals:

- Identify and activate champions to engage in data-driven healthcare improvement;
- Identify core elements of successful external facilitation to guide the use of precision monitoring; and
- Apply the Consolidated Framework for Implementation Research (CFIR) constructs and measures across projects to identify implementation strategies and contextual factors that impact how people use data to transform healthcare.

Project Summaries

- **National Evaluation of TeleStroke.** Dr. Graham (Deputy Director of Neurology and TeleStroke Director), Dr. Martini (TeleStroke Clinical Director), and Katie Murphy (TeleStroke Program Manager) requested that the PRIS-M QUERI team provide a formal evaluation of this five-year program, with the initial evaluation beginning in FY2017. The primary aims of the evaluation are to:
  1. Conduct an assessment of baseline process of care and patient outcomes related to acute stroke evaluation and care at VAMCs participating in the TeleStroke network;
  2. Assess facility, provider, and technological contextual barriers and facilitators to TeleStroke adoption and use;
  3. Evaluate the impact of the TeleStroke program on patient, provider, and health system outcomes; and
  4. Obtain an estimation of key FTE and cost data necessary to construct a future business case analysis of TeleStroke care.

This program has enormous potential for increasing access to stroke specialists and to thrombolysis for Veterans with acute stroke, as well as for fostering patient and employee satisfaction. The development of a “virtual” TeleStroke network is unique, since most other TeleStroke systems of care involve transfer of the patient to the institution of the telestroke provider. Our evaluation will provide important assessment of the data needs, impacts on TeleStroke and emergency department providers, and patient-centered outcomes including satisfaction with the TeleStroke evaluation.
• **Protocol-guided Rapid Evaluation of Veterans Experiencing New Transient Neurological Symptoms (PREVENT).** This stepped-wedge trial is being conducted at six sites with three implementation waves and two sites per wave. The primary aims are to:
  1. Develop a quality improvement (QI) program to improve the care of Veterans with TIA or minor stroke that can be deployed nationwide;
  2. Evaluate the effectiveness of the Aim 1 QI intervention program for Veterans with TIA or minor stroke against usual care;
  3. Evaluate the implementation of the QI intervention program; and
  4. Evaluate CFIR constructs and contextual factors associated with successful and suboptimal implementation of this new program.

The secondary aim is to evaluate the sustainability of the program. The QI program includes five components.

• **De-implementation of Inappropriate Carotid Ultrasound Ordering.** The goal of this project is to reduce the number of inappropriate carotid ultrasounds ordered for Veterans with asymptomatic carotid stenosis, using a CPRS-based decision support tool in three test sites. Additionally, investigators will evaluate the effectiveness of the implemented tool in order to expand the tool to other facilities, if it proves to be successful.

• **Remote Obstructive Sleep Apnea Monitoring (IN TOUCH).** In partnership with the Richard L. Roudebush VA Medical Center, the goal of this local QI project is to evaluate the implementation of a remote positive airway pressure monitoring program to improve care and access for Veterans with sleep apnea.

• **Evaluation of VA Tele-Stroke Robotic Rehabilitation Program Implementation.** The PRIS-M QUERI has partnered with the larger Tele-Stroke Robotic Rehabilitation program team based in Atlanta to conduct this implementation evaluation that focuses on three specific aims:
  1. Building and maintaining an implementation infrastructure;
  2. Developing and refining facility-specific implementation plans for successful program deployment; and
  3. Evaluating implementation progress in terms of fidelity, reach, acceptability, satisfaction, and adoption.

Successful implementation and scaling up of this program should provide greater access for Veterans to post-stroke rehabilitation and help restore Veteran trust and confidence in VA by meeting rural Veterans’ needs. In terms of employee engagement, this project seeks to engage rehabilitation and neurology staff in in the successful implementation of Tele-Robotics at their facilities and to foster long-term program sustainment. *(This project is being funded by the Office of Rural Health.)*

**Impacts**

• **Clinical Outcomes.** The IN-TOUCH program used remote positive airway pressure (PAP) monitoring and leveraged existing VA Sleep Medicine and Telehealth infrastructure to provide in-home care for Veterans with obstructive sleep apnea. Among the 200 Veterans who received a PAP device (N=59 IN-TOUCH; N=141 usual care), IN-TOUCH patients had improved clinical outcomes. Effective PAP therapy was achieved in 31.6% of IN-TOUCH patients compared with 19.2% of usual care patients.

• **Access to care.** Implementation of remote PAP monitoring has the potential to improve access because IN-TOUCH encounters required 20 minutes whereas in-person PAP clinic encounters take 40 minutes. Moreover, the PAP clinic currently has a 21% missed-opportunity (“no-show”) rate that is not an issue with remote PAP monitoring.

• **Adoption.** Roudebush VAMC has locally adopted the IN TOUCH program into its sleep service.

**Program Leadership**

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**Principal Operational Partners**

• Office of Analytics and Business Intelligence
• Inpatient Evaluation Center
• Office of Specialty Care Services
• Office of Rural Health
• VA Telehealth Services
• Veterans Engineering Resource Center

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