

## Background

In *Crossing the Quality Chasm*, the Institute of Medicine began to emphasize that care should not occur just within face-to-face visits, but that “access to care should be provided over the Internet” to foster continuous healing relationships. Subsequent reports have continued to support the concept of eHealth as a means to:

- Increase patient access,
- Activate patients in their care, and
- Re-engineer patient-centered care.

The eHealth model of care is envisioned to augment, not replace, traditional services such as telephone contacts and in-person clinical visits and calls for the effective use of technologies that are accessible, acceptably usable, and integrated to connect patients with healthcare systems. eHealth tools can support more continuous care between visits, and allow for efficient completion of routine tasks so that patients and caregivers can get the most out of face-to-face visits.

## eHealth Quality Enhancement Research Initiative

eHealth-QUERI's strategic goals are to augment access to and meaningful use of eHealth tools, and to enhance Veteran self-management and participation in collaborative care through the design, evaluation, and implementation of appropriate eHealth tools.

With these two goals, eHealth-QUERI seeks to implement into practice and evaluate eHealth as a model of care for enhancing the efficient, safe, high-quality, continuous, coordinated delivery of evidence-based services to Veterans and

their families. eHealth-QUERI works closely with its founding operational partner—the Veterans and Consumers Health Informatics Office (V/CHIO), the home of the My Health<sup>e</sup>Vet (MHV) Program, to increase adoption and effective use of the MHV personal health record portal. At present, an exciting set of features is available within the MHV system, and the development of additional features is ongoing.

## Clinical-Research Partnerships

Unlike other QUERI Centers, eHealth-QUERI's focus is not disease-specific. Rather, its “clinical” focus is eHealth, which is applicable across health conditions. Accordingly, its mission is to work with VA program offices to implement into practice and evaluate eHealth as a model of care for augmenting efficient, safe, high quality, continuous, coordinated delivery of evidence-based services to Veterans and their families. The eHealth-QUERI also collaborates with condition-based QUERI centers and researchers to improve care. In line with eHealth-QUERI's founding operational partner, the majority of its initial projects focus on the My Health<sup>e</sup>Vet system.

## eHealth-QUERI Projects and Findings

Currently, eHealth-QUERI's portfolio of work addresses a variety of topics that are critical to furthering eHealth as a model of care in the VA healthcare system. Examples of these efforts follow.

## Providing Insights into the My Health<sup>e</sup>Vet Program

Over the last year, eHealth-QUERI investigators have collaborated with the My Health<sup>e</sup>Vet Program to design

## About QUERI

VA/HSR&D's Quality Enhancement Research Initiative (QUERI) currently focuses on ten areas of great importance related to healthcare for Veterans: Chronic Heart Failure, Diabetes, eHealth, HIV/Hepatitis, Ischemic Heart Disease, Mental Health, Polytrauma and Blast-Related Injuries, Spinal Cord Injury, Stroke, and Substance Use Disorder.

Working with health system partners to develop research that speeds improvements in Veterans' healthcare, QUERI utilizes a six-step process to diagnose gaps in performance and identify and implement interventions to address them.

- Identify priority conditions and opportunities for improving the health of Veterans.
- Identify effective practices for improving outcomes for priority conditions.
- Examine variations in existing practices, the sources of variation, and their relation to health outcomes.
- Identify and test interventions to improve the delivery of best practices.
- Evaluate the feasibility, adoption, and impact of coordinated improvement programs to spread best practices.
- Evaluate the effects of improvement programs on Veterans' health outcomes, including quality of life.

and conduct a survey of facility- and VISN-level MHV coordinators. My HealthVet leadership provided input into the design of the survey instrument, as well as the opportunity for eHealth-QUERI investigators to administer the survey during a series of national MHV coordinator training sessions in June 2011. Eight-seven percent of the MHV facility coordinators and fifty-seven percent of the MHV VISN coordinators responded to the survey. Questions focused on:

- MHV coordinator background,
- Prioritization of MHV-related responsibilities,
- Perceived support from leadership and staff members,
- Resources available to attain performance goals, and
- Best practices for increasing MHV adoption.

Close collaboration with the MHV Program Office on this initiative yielded a dataset with clear operational and research uses. Data analysis is ongoing and is providing insights into factors that can influence the work of MHV facility coordinators and registration rates with the MHV system.

Another study entitled “An Evaluation of the Blue Button Feature of My HealthVet” represents a close collaboration with the My HealthVet Performance Evaluation Workgroup, a team of VA researchers, clinicians, operations and policy experts who work with MHV Program Office leadership to guide ongoing evaluation efforts related to the MHV system. Developed to facilitate care coordination efforts, the Blue Button is a feature available on My HealthVet through which Veterans can quickly and efficiently print or download personal health information from their MHV record. eHealth-QUERI investigators are surveying Veterans and healthcare providers to determine the knowledge, perceived value, and ease of use of the Blue Button and the reports it generates. The specific aims of the study are to:

- Examine patient and provider experiences with personal health records

and the MHV Blue Button feature in order to identify barriers and facilitators to the adoption and use of the Blue Button, and

- Determine characteristics associated with use of and satisfaction with the Blue Button feature, and whether these associations changed in the one-year period after the Blue Button was introduced.

### Improving Secure Messaging

An ongoing study entitled “Integrating Secure Messaging into Health Care Team Delivery Workflow” is addressing barriers to Secure Messaging adoption through an examination of healthcare provider experiences and attitudes, including concerns over increases in workload. Investigators are using a corpus of 1,000 actual Secure Message threads to characterize message content, tone and complexity. This data will be combined with information collected through interviews with healthcare providers to create process maps illustrating common means of message routing and resolution. The overall aim of this work is to develop successful workflows for important and common message types, and to minimize workload and reduce provider burden and other barriers to secure messaging use with Veterans.

Another ongoing study entitled “Veterans’ Experiences and Usability of Secure Messaging on My HealthVet” combines qualitative interviews of “high volume” and “low volume” secure messaging users with usability testing processes. The interviews are focused on Veterans’ beliefs, attitudes, perceived behavioral control, and behavioral intention, and the implications of these concepts for secure messaging use and adoption. After the initial interviews and testing, Veterans’ messaging behavior will be monitored longitudinally in order to characterize the actual content and frequency of secure messages. The primary aim of the study is to describe Veterans’ experiences when using MHV’s secure messaging feature.

### Contact information for eHealth QUERI:

Beth Ann Petrakis, M.P.A.  
Administrative Coordinator  
Tel: (781) 687-2975  
E-mail: BethAnn.Petrakis@va.gov

### Contact for general QUERI information:

Linda Mclvor, M.H.S., M.S.  
QUERI Program Manager  
Tel: (202) 443-5740  
E-mail: Linda.Mclvor@va.gov

### The eHealth-QUERI Executive Committee

Each QUERI is led by a research expert and a clinician. The research expert and Director for the eHealth QUERI is **Thomas K. Houston, M.D., M.P.H.** and the Clinical Coordinator is **Bonnie Wakefield, Ph.D., R.N.** The Implementation Research Coordinator is **Timothy P. Hogan, Ph.D.** The eHealth QUERI Executive Committee brings together a diverse group of individuals from inside and outside the VA with expertise in the fields of healthcare, medical informatics, and eHealth: Russell Glasgow, Ph.D. (chair); G. Alexander “Sandy” Creighton, Veteran Representative; Timothy J Cromwell, R.N., Ph.D., P.M.P.; Adam W. Darkins, M.B., Ch.B., M.PHM, M.D., FRCS.; Joseph Erdos, M.D., Ph.D.; Mary Goldstein, M.D., M.Sc.; Kim M. Nazi, FACHE, Ph.D.(c); Walter Paul Nichol, M.D.; James D. Ralston, M.D., and Catherine J. Rick, R.N., FAAN, FACHE.

### QUERI web link:

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