QUERI Quarterly

NEWSLETTER OF THE QUALITY ENHANCEMENT RESEARCH INITIATIVE

Vol 2, No 3 January, 2001

Director's Letter

It is gratifying to see the rapid progress being made as each of the eight QUERI groups operationalizes its translation plan. The consultation visits have now been completed and the signs of success are obvious.

New resources are available to facilitate QUERI goals, including $4.5 million dollars in medical care funds that have been secured, reflecting a solid commitment to the continued success of QUERI. These funds are separate from existing HSR&D allocations. New funding mechanisms are also in place, and two translation solicitations were issued in October. Both solicitations are co-sponsored by HSR&D and the Office of Quality and Performance (OQP). In early November, HSR&D and OQP reviewed fourteen concept papers; of these, twelve were approved and two were referred to the Investigator Initiated Research (IIR) program. The investigators were notified and submitted proposals in early December. A review of these first translation proposals was then conducted in Washington, DC.

The availability of additional resources is only one of many signs that QUERI is moving into a new phase characterized by rapid advances and the development of infrastructures that facilitate translation. Integration with clinical managers, quality managers and others must accelerate, thus a

Continued on page 3

CHF QUERI Investigates High Readmission Rates

Nearly five million Americans suffer from chronic heart failure, and these numbers are increasing.[1] As a result, there is intense utilization of both inpatient and outpatient services for patients with heart disease. In addition, nearly 20 percent of patients discharged with a diagnosis of heart failure in a given year in the VA health care system will be readmitted within 14 days.[2] From the viewpoint of the health care system, the heavy use of services is a matter of serious concern because of the burden on health care resources and the high financial costs. More importantly, from the patient's viewpoint, it signifies frequent cyclical decompensation in a disease that is already associated with poor functional status, an inability to pursue normal daily activities, and constant disruption of home and family life.

How do we decrease readmissions for this disease? Chronic Heart Failure (CHF) QUERI is working to address this question by investigating the reasons behind the high rate of readmissions. One of the factors associated with a higher likelihood of readmisssion is releasing the patient before discharge criteria are adequately met.[3] These discharge criteria include clinical stability, education of the patient and family, and a plan for follow-up medical care. Therefore, measures to insure readiness for hospital discharge – prior to discharge – may be the first in a series of steps toward reducing heart failure readmissions.

There is also a growing body of evidence to suggest that comprehensive, multidisciplinary programs for patients with heart failure can reduce the risk of hospital admission, improve functional status, and possibly lower medical costs.[3] Using nurse managers in pivotal roles to coordinate care is one example. The central intent of most of these programs has been to emphasize compliance with recommended therapy, enhance patient education (i.e., weight monitoring and salt restriction), and provide careful outpatient surveillance and follow-up.[4]

In keeping with QUERI's goal to create measurable, rapid and sustained improvements in the quality of care and health outcomes of veterans, the focus of this specific project is directed at developing and implementing strategies to decrease the rate of readmission in patients with chronic heart failure. This CHF QUERI project will target selected intervention sites in the VA medical

Continued on page 2

In This Issue

An Update From QUERI-HIV: Moving Toward Intervention

VHA provides health care for about one-third of the veterans who are infected with HIV. The high percentage of veteran patients with HIV, coupled with the unusual nature of the disease, has made HIV a priority for VHA since the beginning of the pandemic. Thus, QUERI-HIV began with some advantages that include a relatively defined patient population, reasonable data resources, clear standards on which to base quality process of care indicators, and locally identified foci for HIV care at most sites. QUERI-HIV research also benefits from an excellent working relationship with the Center for Quality Management (CQM) in HIV Care, and with the VA AIDS Service.

The QUERI-HIV program has taken advantage of these assets to begin quality improvement work on a number of fronts. The focus of current projects include: evaluating adherence from an economic perspective, assessing current and recommended screening practices, validating and augmenting VA's Immunology Case Registry (see article on page 3 for more information), and interviewing veterans regarding subjective outcomes and care provided outside VA. However, the centerpiece of QUERI-HIV efforts is its two intervention studies.

The first of these studies is an attempt to address the vital question of adherence, an area where there are many ideas for interventions but little theory to guide development. This project will establish a four-site system for conducting serial pilot studies to rapidly perform preliminary evaluations of adherence interventions. In addition, this project will establish and test specialized, pharmacist-led clinics for improving antiretroviral adherence, and will use these clinics to conduct evaluations of a series of interventions, such as self-efficacy teaching and automated reminders. The key elements of this unique project are: 1) close collaboration with non-physician services, 2) rapid evaluations of implementation, acceptability, and preliminary efficacy, and 3) staggered implementation of the interventions.

The second intervention study is an ambitious quasi-experiment to be conducted at 16 to 20 sites, in close collaboration with CQM. Initially, three models of implementation will be developed: 1) aggregate feedback, 2) individual audits via computerized reminders, and 3) intensive facility-specific feedback that fosters small group decision-making. All sites will receive intervention one, and then also be randomized to receive either intervention two, intervention three, both two and three, or no additional intervention(s). This intervention will continue for one year, and primary outcomes (measured at 6 and 12 months) will include changes in the appropriateness of the process of antiretroviral therapy and monitoring.

Over time, QUERI-HIV will work to support the implementation of these interventions, along with other promising translational interventions, in all VA facilities.

Sam Bozzette, MD, PhD
QUERI-HIV, Research Coordinator

QUERI Quarterly is a quarterly publication of the Office of Research and Development's Health Services Research and Development Service. This newsletter discusses important issues and findings regarding the Quality Enhancement Research Initiative. QUERI focuses on the following conditions due to their high volume and/or high risk among VA patients: chronic heart failure, diabetes, HIV/AIDS, ischemic heart failure, mental health, spinal cord injury, stroke, and substance abuse. *QUERI Quarterly* is available on the web at www.va.gov/resdev/prt/alpha.htm and on our FAX service by calling (617) 278-4492 (please follow voice prompts). For more information or to provide us with feedback, questions or suggestions, please contact:

Geraldine McGlynn, Editor
Information Dissemination Program
Management Decision and Research Center (152M)
Boston VA Health Care System
150 South Huntington Ave
Boston, MA 02130-4893

Phone: (617) 278-4433
FAX: (617) 278-4438
E-mail: geraldine.mcglynn@med.va.gov

High Readmission Rates

Continued from page 1

care system and also monitor improvement in outcomes following implementation.

1. 2000 Heart and Stroke Statistical Update, American Heart Association.

2. Wray NP, Peterson NJ, Souchek J, Ashton CM, Hollingsworth JC. Application of an analytic model to early readmission rates within the Department of Veterans Affairs. *Medical Care* 1997;35:768-781

3. Ashton CM, Kuykendall DH, Johnson ML, Wray NP, Wu L: The association between the quality of inpatient care and early readmission. *Annals of Internal Medicine* 1995;122:415-421

4. Philbin EF: Comprehensive multidisciplinary programs for the management of patients with congestive heart failure. *Journal of General Internal Medicine* 1999;14:130-135

Creating a Quality Enhancement Dataset

More than a decade ago, the VA AIDS Service began to centralize essential data on veterans with HIV in the Immunology Case Registry. While some of this information is automatically downloaded from facilities, initial data are entered via manual processes and are, therefore, subject to error. As the Center for Quality Management and the AIDS Service work to improve the quality and local usefulness of new data, QUERI-HIV is concentrating on creating a more complete, stable and permanent Quality Enhancement Dataset.

One of the first steps is to identify omissions from the Registry. The method used to accomplish this is to identify veterans with characteristics indicative of HIV disease on other national VA databases, such as encounter records at the Austin Automation Center (AAC) and dispensing records on the Pharmacy Benefits Management (PBM) database. This information is then compared to the Registry population. For example, for fiscal years 1998 and 1999, 5,874 veterans *not* listed on the Registry had at least one AAC record indicative of HIV disease. In addition, preliminary analysis of PBM data indicates that another 202 veterans received antiretroviral agents while under VA care during fiscal year 1999. Even allowing for a number of coding errors, these apparently omitted cases represent about 20 percent of the veterans with HIV disease under VA care.

Confirming and evaluating omitted patients to determine, for instance, their relationship to designated AIDS coordinators and programs will provide insights into improving access to high quality care.

*For more information about QUERI-HIV, visit their web site at http://va-queri-hiv.ucsd.edu/

VIReC Supports QUERI Informatics

As the QUERI groups have progressed through the successive steps of the QUERI process toward translation and impact, data and informatics support needs have changed. The VA Information Resource Center (VIReC), located at the Hines VA Hospital in Hines, IL, provides information to researchers, managers and clinicians about the content, availability, reliability, validity and accessibility of data sources within VA and for select non-VA databases. Thus VIReC is well suited to help define a strategy and agenda in working with the eight QUERI groups to meet their new informatics needs.

VIReC's efforts will be collaborative, focused on building greater connectivity within and among QUERI Coordinating Centers, HSR&D Headquarters staff, other VA offices and practitioners in the field. More specifically, VIReC will work to:

- create and lead a QUERI Data Issues Work Group;
- serve as HSR&D service point of contact with the VA Information Office;
- coordinate QUERI data requests with the Information Office;
- provide consultative advice to QUERI on information technology approaches;
- maintain the QUERInfo listserver e-mail group; and
- collaborate on data reliability and validity studies.

Additional information on VIReC and its role in assisting the QUERI project may be obtained by contacting Joseph D. Kubal, Center Manager: phone (708) 202-2413, e-mail Kubal@research.hines.med.va.gov, or by accessing the VIReC web site at http://www.virec.research.med.va.gov.

Give us feedback about QUERI Quarterly using the web at http://www.va.gov/resdev/prt/idp/

Director's Letter

Continued from page 1

new workgroup has been established. The purpose of this workgroup is to enhance the use of QUERI findings and tools in clinical practice and in quality improvement activities. As this occurs, increased attention will be given to cross-cutting issues and new ways to exchange ideas.

Ultimately, continued progress rests on our ability to create strong partnerships at all levels. I look forward to working with each of the eight groups in the coming months as the translation plans are implemented and the infrastructures that support translation evolve.

John G. Demakis, MD
Director, HSR&D

Factors Influencing Effectiveness of Clinical Guideline Implementation

One of QUERI's main goals is to identify the best evidence-based clinical practices and, when necessary, develop clinical guidelines to promote uniformity in care. In this way, all patients are assured consistent and predictable high quality care. The systematization of best practices is at the heart of this process. One of the crosscutting projects the QUERI initiative supports is a system-wide effort to investigate best practices. Adherence to best practice guidelines is a vital element of this research and appears to be influenced by several factors such as:

- implementation processes,
- organizational culture,
- characteristics of the guideline, and
- rewards and sanctions at the organizational level.

A national QUERI research project, based at the Iowa City VAMC, is examining the relationship between effective guideline implementation and VA facilities' organizational characteristics, implementation structures and processes. Researchers are also investigating multiple guidelines to explore how characteristics of each guideline affect implementation and adherence.

With four distinct phases, this project is utilizing qualitative and quantitative research methods to study the process of guideline implementation. VA medical centers nationwide have been selected to represent a range of geographic, bed-size, teaching affiliation, patient population gender, and racial/ethnic distributions. In phase one of the study, interviews and focus groups have been conducted with primary care administrators, providers and staff at eighteen selected facilities. These interviews are informing the process of clinical guideline implementation by identifying important barriers and facilitators. They have also furthered the development of a survey for the second phase of the project.

In phase two, Performance Improvement Coordinators and mid-level managers in all VA facilities will be surveyed to determine what approaches are being used to implement clinical guidelines. These surveys include questions about the implementation methods used in recently mandated guidelines, institutional support, respondents' attitudes and beliefs about the usefulness of specific guidelines, availability of feedback and provider adherence, as well as barriers and new approaches to incorporating guidelines into clinical practice.

The final two phases of this study (if funded in a competitive renewal) will involve an in-depth exploration of the implementation of newly mandated guidelines. For example, surveys will be developed for administrators and practitioners who are involved in the clinical areas affected by the guidelines that were nationally mandated during the study year. Analysis of the results of these surveys will identify the implementation process factors that vary across institutions, and the degree to which these factors are related to adherence rates.

This project will lead to a better understanding of the processes involved in clinical guideline implementation and adherence, thus advancing the QUERI directive of translating research into practice.

Brad Doebbeling, MD, MSc
Program in Health Services Research
Iowa City VAMC &
Departments of Internal Medicine & Epidemiology, University of Iowa

Bonnie BootsMiller, PhD
Program in Health Services Research
Iowa City VAMC

Submissions

QUERI Quarterly is glad to accept submissions for publication consideration. Please submit articles, updates or other information of interest to our readers by Friday, January 26, 2001 for publication in our March issue. Submit to Diane Hanks at diane.hanks@med.va.gov.

Clinical Guidelines Available Online

The Office of Quality and Performance maintains a Web site on the VA Intranet that provides a centralized location for researchers to view current VHA Clinical Practice Guidelines *by disease* and, in many cases, the VISN performance data associated with these guidelines. This information may be accessed at http://vaww.va.gov/quality/quality/qi_VHA_guidelines.cfm.