

Director's Letter

In our July meeting, which focused on the translation process (see article on page 2), HSR&D Headquarters introduced a QUERI Translation Team as a new resource for all eight QUERI groups. The QUERI Translation Team is comprised of several multi-disciplinary consultants with a wide range of expertise, such as implementation of practice change, evaluation and measurement of impact, understanding national policy strategies, dissemination of findings, and issues surrounding data (ie, access, use and maintenance of data or databases).

HSR&D's goal in assembling this team is twofold. 1) The Translation Team will assist each group as they pursue the deadline of having measurable impacts by December, 2001. 2) And they will help plan an infrastructure, being established collaboratively by Headquarters and the groups, which will support ongoing translation activities. In general, the QUERI Translation Team will provide advice and support on an as needed basis to all QUERI groups in their translation efforts to help facilitate this process. We look forward to making this a very productive time for QUERI.

Translating research evidence into practice involves multiple, diverse components including targeted dissemination, credibility of the "message" as well as the "messenger," learning, and behavior

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## Diabetes: Managing A High-Risk Disease

Diabetes is a high-risk, high-volume disease that affects about 1 in 8 patients seen in VHA, which is why it was chosen for the QUERI initiative. Veterans with diabetes account for more than 75,000 VHA hospital admissions per year, with cardiovascular disease as the leading cause of complications and death. For example, middle-aged patients with diabetes have 2 to 4 times the risk of cardiovascular events (e.g., heart attack, stroke, and congestive heart failure) compared to control subjects matched for both age and sex.<sup>1</sup>

There are several risk factors that can affect patients with diabetes and interventions to help reduce those risks. Managing high blood pressure can reduce the risk of hypertension, thus reducing the risk of stroke or coronary artery disease; improving glycemic control can decrease the long-term risks of blindness, end-stage renal disease, and amputations; and eye screening and early intervention (laser surgery) has been demonstrated to preserve visual function in diabetic patients.<sup>2</sup>

The QUERI Diabetes Mellitus (QUERI-DM) group works to improve these risk factors with recent studies focusing on an intervention to reduce the risk of coronary artery disease for veterans with diabetes.

***QUERI DM study suggests aggressive lipid-lowering treatment necessary for patients with diabetes***

Since coronary artery disease is the

major cause of morbidity and mortality among veterans with diabetes, a performance measure of <130 mg/dl has been established for low density lipoprotein cholesterol (LDL-C). QUERI-DM utilized the VA Healthcare Analysis Information Group Diabetes Project database to identify demographic characteristics of veterans who were not receiving lipid-lowering medications, despite having a last recorded LDL-C level >130 mg/dl.<sup>3</sup> In FY98, 110 facilities contributed LDL data on their patients with diabetes. A cohort of 111,311 of these patients had at least one LDL test performed with triglycerides less than 400 mg/dl.

Using multivariate analysis, results of this study showed that several patient characteristics were associated with an increased likelihood of not being on lipid-lowering medication, despite an LDL-C above 130 mg/dl. These characteristics included: age under 65, age 75 years and older, being female, unmarried, or non-white, and the absence of coronary artery disease. Findings also showed that approximately 65% of patients with high LDL-C and a diagnosis of

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# QUERI Annual Meeting 2000 Focuses on Translation

VA's Health Services Research and Development Service (HSR&D) held a special Translation Meeting on their Quality Enhancement Research Initiative (QUERI)\* in Washington, DC on July 17–18. Members of QUERI's Research & Methodology Committee, Research and Clinical Coordinators, and invited translation and policy experts convened to discuss implementing QUERI's translation efforts. Translating QUERI findings into optimal patient outcomes and system-wide improvements is the primary goal of the QUERI initiative. With effective translation strategies, QUERI will establish VA as a leader in systematic quality improvement at the national level.

John G. Demakis, MD, Director of HSR&D, and Lynn McQueen, DrPH, RN, QUERI's Associate Director, led the Translation Meeting, which was built around inter-QUERI workshops to facilitate the progress of all eight QUERI groups by:

- promoting information exchanges,
- developing action steps to address common problems,

- providing mechanisms for sharing resources, and
- coordinating mutually beneficial activities across groups.

The idea of establishing inter-QUERI work groups to focus on Data Issues, Dissemination, Evaluation, Implementation, and National Policy was explored. The Data Issue Work Group explored common data concerns across groups; for example, issues regarding access, use and maintenance of data or databases. The Dissemination Work Group discussed active, multifaceted approaches to getting research findings to clinicians, policy makers and other target audiences. The Evaluation Work Group focused on measuring impact and how mechanisms for this might be shared. The Implementation Work Group investigated implementation techniques being used across QUERI groups for effectiveness, and the National Policy Work Group talked about how policies are 'systematized' at the national level. These work groups will assist the QUERI groups

and HSR&D Headquarters in preparing a National Action Plan for QUERI translation efforts.

The Translation Meeting's invited speaker was Ed Westrick, MD, PhD, who is the Chief Operating Officer of Quality Partners, and is on the faculty at Brown University and the University of Rhode Island; he also works with MagnaCare as a performance improvement consultant. Dr. Westrick addressed attendees on "A Functional Approach to Evaluative Research." Other invited translation experts included Susan Hull, RN, MSN, WellSpring, Temple, Texas; Brian Mittman, PhD, Senior Social Scientist, VA Los Angeles Healthcare System; Frank Moore, PhD, Co-Investigator, Veterans Evidence-Based Research, Dissemination and Implementation Center (VERDICT), Charleston, SC; Cheryl Stetler, PhD, RN, FAAN, a translation expert/consultant for evidence-based practice; and Barry Sugarman, PhD, Professor of Management at Lesley College and research member of the Society for Organizational Learning.

Prioritized action steps coming from the meeting include optional site visits, where translation experts will work with each group, and the establishment of an interactive web community. By collaborating through workshop activities, communicating effectively, promoting sound, rapid decision-making, and building network alliances, all those involved with the QUERI initiative will work together to facilitate translation.

*\*For more information about QUERI, please contact QUERI's Associate Director, Lynn McQueen, DrPH, RN at (202) 273-8227, or e-mail at [lynn.mcqueen@mail.va.gov](mailto:lynn.mcqueen@mail.va.gov).*

## Director's Letter

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change. As QUERI moves forward, we will be digesting and utilizing all that is currently known about successful and timely translation in our efforts to positively and measurably affect health outcomes. In some cases, I'm sure we will find ourselves in uncharted translation territory.

However, within each of the eight QUERI groups we have assembled the best research and clinical minds to collaborate on tackling these issues, thus I am confident that we will be successful.

*John G. Demakis, MD  
Director, HSR&D*

## Diabetes

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coronary artery disease received lipid-lowering medications (statins or fibrates) in contrast to about 45% of veterans with high LDL-C, without a diagnosis of coronary artery disease.

This treatment disparity suggests that many clinicians are not aware that having a diagnosis of diabetes requires aggressive lipid-lowering treatment even in the absence of established

coronary artery disease. QUERI-DM recommends that VA facilities target this opportunity for treatment improvement through educational efforts and site level data feedback to clinicians. Lipid-lowering treatment is one of several interventions that should be considered in treating patients with diabetes.

<sup>1</sup>Practice Matters, Management Decision and Research Center, VA Health Services Research and Development Service. Vol. 5, Issue 1, May 2000.

<sup>2</sup>Krein SL, Hayward RA, Pogach L, BootsMiller BJ. *Medical Care VA QUERI Supplement*. 38(6):I38-I48. June 2000

<sup>3</sup>Pogach L, Hawley G, Repke D, Sawin CT, Scheibe H, Cutler F. Demographic characterization of lipid profiles and lipid-lowering medication use by veterans with diabetes. Abstract 1911P, ADA Scientific Meetings, June 2000.

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## Spinal Cord Injury and Secondary Complications

Approximately 200,000 persons in the United States have spinal cord injury (SCI) and nearly one-quarter are veterans. Because SCI is a life-long condition, associated costs are high – about \$9.7 billion per year. In addition to impaired function, altered physiology, and an often significant change in social roles, persons with SCI also experience many secondary complications as a result of their injury that require ongoing and preventative care.<sup>1</sup> Some of these complications include altered bowel function, pain, urinary tract infection, and pressure ulcers. Another of these complications is impaired pulmonary function. Over half of the people with SCI have significantly impaired pulmonary function and are at high risk of developing pulmonary complications.<sup>2</sup>

Influenza vaccine is important for patients with spinal cord injury. Since pulmonary conditions are the leading cause of death for persons with paraplegia and tetraplegia, prevention of influenza is essential. One study reports that persons with SCI who contract influenza or pneumonia have a 37 percent higher likelihood of death<sup>2</sup>. In addition, examination of VHA External Peer Review Program

(EPRP) data found that national vaccination rates for SCI veterans for years 1996, 1997 and 1998 were low (13%, 25%, 26%, respectively).<sup>3</sup> Based on these data, it is unclear whether the lower rates of vaccination for patients with SCI are the result of limited implementation of these recommendations, inadequate documentation, multiple providers, or time of year the patient is seen in the health care system.

Although the influenza vaccine has not been specifically targeted to veterans with spinal cord injury, SCI QUERI is working to increase SCI providers' and patients' awareness of influenza, its more severe complications, and the benefits of influenza vaccine among veterans with SCI. These efforts will begin prior to, and during, the upcoming influenza vaccination season (October-December 2000) using a multi-pronged patient/provider education and reminder intervention.

SCI QUERI will assess the number of patients with spinal cord injury who were offered and received a flu vaccine during the 2000-2001 flu season and then compare those numbers to the previous two flu seasons (1998-1999 and 1999-2000). The impact of

providing vaccines on patient health will also be examined by monitoring the rate of health care use (inpatient and outpatient) for incidence of influenza, pneumonia, and related respiratory disorders during each of the flu season periods between 1999 and 2001.

Results of this initial effort will be available by summer 2001, so that providers may be informed for the 2002 flu season.

1. Weaver FM, Hammond MC, Guihan M, Hendricks RD. *Medical Care VA QUERI Supplement*. 38(6):I82-I91. June 2000

2. DeVivo MJ, Black KJ, Stover SL. Causes of death during the first 12 years after spinal cord injury. *Arch Phys Med Rehabil* 1993; 74:248-54.

3. Veterans Health Administration. Spinal Cord Injury Study. Performance Report, March 1, 1999.

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Please take a moment and tell us how you feel about QUERI Quarterly by using our new Instant Feedback Site for VA Health Services Research Publications on the web at (<http://www.va.gov/resdev/prt/idp/>). Your comments and suggestions will guide us in our efforts to provide you with important HSR&D information in future issues.

# Translation and the Importance of Evaluation

The evaluation process encompasses a set of activities that measure the effects of a new policy, program or practice. Evaluations must address several basic questions: Is a new policy, program or practice effective (or will it be effective)? What are the costs and benefits? What are the program's goals, objectives and expectations? And what factors influence program impacts, and how might they be improved?

While evaluations are common, consensus regarding evaluation methods is not. However, in order for an evaluation to be useful certain steps must be followed. The evaluation process should include six steps: design, instrument and protocol development, data collection, analysis, interpretation, and documentation.

- Designing an evaluation requires attention to program goals and objectives to assure proper focus of the evaluation.
- Development of data

collection instruments and protocols requires consideration of validity and the nature of variables and measures.

- Data collection related to process and outcome impacts poses different challenges.
- Data collection and analyses should be guided by pre-specified, model-based hypotheses and detailed analysis plans.
- Interpreting evaluation results involves the consideration of several factors, such as the program's effectiveness, costs, benefits and processes.
- Full documentation requires reporting on the program and its key features (design, context and implementation), in addition to its impacts.

These steps are vital to producing a valid and useful evaluation.

Coordinating and carrying out this evaluation process can be complex, but it is essential to conducting quality improvement research that fully examines the patient outcome and system impacts of QUERI translation efforts.

Although "magic bullets" do not exist, evaluation *practice* might better approach evaluation *science* if we rely on explicit conceptual and theoretical models, engage in careful, comprehensive planning, and conduct process as well as outcome evaluations. The Translation Team consultants will be a resource in helping design and carry out the unique evaluation needs for each QUERI group.

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## **Submissions**

*QUERI Quarterly* is glad to accept submissions for publication consideration. Please submit articles, updates or other information of interest to our readers by Monday, October 30, 2000 for publication in our December issue. Submit to Diane Hanks at [diane.hanks@med.va.gov](mailto:diane.hanks@med.va.gov).

*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. Initially, QUERI will focus 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](http://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:

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