QUERI Quarterly

NEWSLETTER OF THE QUALITY ENHANCEMENT RESEARCH INITIATIVE

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Director's Letter

QUERI's progress has been strongly influenced by a dynamic partnership with VHA's Office of Quality and Performance (OQP). As Chief Quality and Performance Officer for VHA, Jonathan B. Perlin, MD, PhD, MSHA, FACP, actively supported QUERI as one component of VA's commitment to evidence-based quality improvement. Dr. Perlin now serves as Acting Deputy Under Secretary for Health, and continues to assist QUERI's successful integration with OQP, working closely with Tom Craig, MD, Acting Chief Quality and Performance Officer, in order to facilitate ties between research and practice.

OQP staff routinely contributes to QUERI in a wide variety of ways, including work on quality management issues, data and informatics, participation in QUERI's Research and Methodology Committee, and assisting with guideline development and implementation. The development of clinical practice guidelines is a large part of OQP's mission, and they work to develop guidelines that are evidence-based, valid, reliable, cost-effective, clear, and flexible. Over the past four years, OQP and QUERI groups have fostered good working relationships that have facilitated important collaborations on guideline development and implementation. In fact, the National Clinical Practice

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Predictors of Statin Prescribing in Patients with Ischemic Heart Disease

The benefits of lipid-lowering therapy utilizing statins in patients with coronary heart disease have been well demonstrated in several studies.[1-3] In these studies, treatment with statins was associated with overall risk reductions of 22 to 34 percent. The National Cholesterol Education Panel recommends that patients with coronary artery disease and LDL-c level >=130mg/dl should be treated with lipid-lowering drug therapy.[4]

Many studies have evaluated factors associated with lipid treatment guideline compliance. One of the factors that is consistently significant is lipid panel measurement. Patients who receive a lipid panel measurement are more likely to receive a lipid-lowering medication prescription.[5-8] However, some proportion of patients with LDL-c levels above the guideline threshold for treatment initiation do not receive therapy. Failure to initiate lipid-lowering treatment in these patients represents a missed opportunity to improve the quality of care these patients receive.

The Ischemic Heart Disease Quality Enhancement Research Initiative (IHD QUERI) is a national VA initiative to improve outcomes in veterans with ischemic heart disease. As part of the IHD QUERI Lipid Management Translation Project, we extracted data on all active primary care and cardiology patients with IHD from the Veterans Integrated Service Network (VISN) 20 Data Warehouse, a relational database containing data from the clinical information systems of eight VA medical facilities.

We then conducted a case-control study that included IHD patients who met national guideline criterion[4] for lipid lowering therapy (LDL > 130 mg/dl) but did not use statins. Control subjects were IHD patients who used statins. Patients were defined as having IHD if they had a diagnosis of acute myocardial infarction (AMI), unstable angina pectoris, previous AMI, or other chronic IHD recorded as a principal diagnosis for any inpatient admission or outpatient visit in the prior two years.

Patients who were more likely not to be in compliance with guidelines were those with multiple poor care outcomes, i.e., they had high blood pressure and did not receive other effective secondary prevention drugs such as aspirin, beta-blockers, and ACE inhibitors. They also were less likely to have seen a cardiologist, but had a higher rate of visits to mental health care services. Patients with

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In This Issue

VISN 20 Lipid Intervention Study: Follow-up with Key Players

As part of the Lipid Measurement and Management System (LMMS) study, IHD QUERI conducted pilot interventions to improve measurement and management of LDL cholesterol levels in coronary heart disease patients at 8 medical facilities in VISN 20 (VHA Northwest Network). During post-intervention discussions with clinicians, it became clear that some intervention teams were not able to sustain the intervention activities proposed for their facilities. IHD QUERI then initiated a formal, qualitative study to evaluate the interventions and identify barriers and facilitators to their implementation.

The IHD QUERI team conducted open-ended, semi-structured interviews with 51 of the 64 LMMS intervention participants ("key players") to explore the nature of the interventions and the process of implementation at each facility. Interviews were conducted by telephone or in-person. In developing the interview structure and analysis plan, we focused on three components of the successful implementation of evidence-based practice:

- Evidence,
- Context, and
- Facilitation.

We asked LMMS participants for a detailed description and evaluation of the intervention, explored the respondent's role in planning and implementation, and identified specific barriers and facilitators in the evidence base, organizational context, and process of interventions. Interviews were audiotaped and transcribed as primary data sources for content analysis of participants' experience and attitudes about the interventions.

Although facilities varied in size, type, and intervention selection, a number of common themes emerged from the interviews. The evidence supporting LDL-c guidelines appeared to be well accepted. At most facilities, access to patient records, laboratory tests, and pharmacy services was adequate. However, many respondents noted that limited resources meant that acute care needs generally took precedence over prevention activities. Most of the perceived barriers to successful implementation related to the intervention process itself. Interview responses indicated that planning, including identification of resources and assessment of potential barriers and facilitators, was a critical and universally underutilized step in the intervention process. Lack of defined roles and responsibilities, inadequate buy-in from clinicians, and the absence of strong intervention leadership were all significant barriers to successful implementation.

Many of the important domains identified in the Key Players' interviews can be subsumed under an overall theme of "planning for intervention." Organized team process, documented plans for intervention activities, and ongoing evaluation are essential for sustaining intervention activities. A top priority for facilitating interventions should be the development of educational materials, such as "how to" guides, that teach intervention teams how to anticipate barriers and make plans to address them. Facilitation should also include identifying and fostering local experts in planning and implementing interventions. The IHD QUERI team is currently piloting an organizational assessment tool that will help local intervention teams identify resources, select appropriate interventions, and improve intervention planning and implementation.

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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 eight conditions due to their high volume and/or high risk among VA patients: colorectal cancer, chronic heart failure, diabetes, HIV/AIDS, ischemic heart failure, mental health, spinal cord injury, and substance use disorders. *QUERI Quarterly* is available on the web at www.hsrd.research.va.gov/publications/queri_quarterly/. For more information or to provide us with feedback, questions or suggestions, please contact:

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Using VistA to Assess Adherence to Guidelines

Previous studies have demonstrated considerable variation in the treatment of depressed patients in primary and specialty mental health care, including high rates of under-detection and inadequate psychopharmacological and/or psychosocial interventions. Within VHA, there are extraordinary opportunities to measure and ultimately improve the quality of health care for depression by using available automated data to assess the performance of key aspects of patient care. For example, this data can be used to assess whether or not practice guidelines are being followed. HSR&D's Mental Health QUERI conducted a project to examine the validity of a set of data elements in VHA's automated database (VistA) from which depression guideline performance measures could be assessed. There were two aims of the study:

- To examine whether and to what extent new cases of depression could be identified using VistA, and
- To determine the extent of agreement between performance measures derived from VistA and those determined by chart review.

Historically, guideline concordance rates have been estimated by abstracting paper medical records, but the time and expense of manual chart abstraction limits the number of charts that can be reviewed.

The study investigators randomly selected a sample of 109 patients who were receiving outpatient care at primary care and mental health clinics within one of three VAMCs. According to VistA, these patients were "newly diagnosed" with a depressive disorder and had no depression diagnosis recorded or antidepressant prescription filled in the six months prior to their index visit - the first visit with a diagnosis of depression from August 1999 to August 2000. Investigators then extracted VistA encounter and pharmacy data and reviewed medical records, comparing agreement between these data sources, as well as between possible performance measures. For example, when VistA data indicated that antidepressant medication prescriptions had been filled for patients, was their antidepressant treatment documented in their medical records?

The specific performance measures examined were based on proposed measures for the VHA/DOD (Department of Defense) guidelines:

- The proportion of patients with newly-identified depressive episodes should receive either antidepressant medication treatment for at least 90 days in the next 120 days, or at least eight psychotherapy sessions in the next 180 days.

The results showed that while VistA data identified 109 cases of a newly diagnosed depressive disorder, chart reviews indicated some evidence of depression in only 35% of the medical records for the same patients. In addition, findings show moderate to high levels of agreement between chart review and VistA for the data elements and for the measures of guideline-concordant care. The results also indicate that gaps still exist in the quality of care for depressed patients. Only 51% of patients received any antidepressant medication or psychotherapy visits in the six months following the index visit for depression.

Because automated data have several advantages over chart review methods, investigators have tried to determine whether such information provides a valid representation of what actually occurs in clinical practice. The results of this study suggest that VistA data about antidepressant treatment could be used to estimate performance of guideline recommendations for depression, and, further, might be used to identify new cases of depression.

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Ischemic Heart Disease

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multiple co-morbidities were more likely to receive treatment with statins.

Our study demonstrates that a proportion of patients with IHD - who meet the guideline recommendation for statin lipid-lowering treatment - do not use statins. Moreover, these patients differ in many characteristics from IHD patients who do use statins. This suggests that failure to comply with recommended cholesterol preventive treatment does not occur at random but has a systematic pattern that can be addressed.

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Director's Letter

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Guideline (CPG) Council is chaired by Leonard Pogach, MD, Clinical Coordinator for the QUERI Diabetes Mellitus group.

The fast pace of effective collaboration between QUERI and OQP activities is not only mutually beneficial to individual efforts, but also facilitates overall improvement in outcomes important to veterans and to our organization as a whole. This type of successful alliance is at the heart of evolving systematic approaches to promote use of evidence. I appreciate the contributions of all those who make this partnership a success and look forward to continued collaboration.

John G. Demakis, MD
Director, HSR&D

* For more information about OQP, visit their website at www.oqp.med.va.gov.

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, November 1, 2002** for publication in our December 2002 issue. Submit to Diane Hanks at diane.hanks@med.va.gov.

QUERI Proposal Submission Deadlines

Quality Enhancement Research Initiative proposals with approved concept papers are expected by September 23, 2002. Thereafter, QUERI SDP concept papers will be due the first business day after January 1 and July 1; full proposals will be due May 1 and November 1, consistent with HSR&D Investigator-Initiated Research (IIR) review deadlines.