



## **Ischemic Heart Disease**

Ischemic heart disease (IHD) is the leading cause of death in the United States for both men and women, with \$100 billion in direct and indirect costs. It is also one of the most frequent indications for hospitalization within the VA health care system. However, despite the availability of nationally developed, evidence-based clinical guidelines, many patients with IHD are not receiving optimal therapy.

The Ischemic Heart Disease Quality Enhancement Research Initiative (IHD-QUERI) utilizes the QUERI process (see back page) to reduce the gap between guideline recommended therapies and actual VA practice, thus improving the quality of care and health outcomes of veterans with ischemic heart disease. IHD-QUERI is currently focused on several clinical problems within the broad scope of IHD that are characterized by both high risk and high volume. IHD-QUERI is working to implement best practice recommendations and research findings for optimal IHD care.

## **IHD-QUERI Projects and Recent Findings**

The current focus for IHD-QUERI is a series of efforts to improve lipid management, increase the use of cardioprotective medications, and increase our understanding of care for patients with acute coronary syndrome (ACS) and angina within the VA health care system. Following are some examples of current IHD-QUERI projects that focus on health issues of critical importance to veterans with ischemic heart disease.

### **Lipid Management Findings**

IHD-QUERI has conducted several studies analyzing lipid management and the use of lipid-lowering drugs among VA patients with coronary heart disease (CHD). Our findings show lipid-lowering drugs, particularly statins, are an effective therapy in secondary prevention of CHD. In one study, we found persistence in the use of statins for our VA patient population with CHD was >70% after 18 months. This is a relatively high compliance rate when compared to a U.S. study showing only a 40% compliance of users after 12 months. A higher compliance may be due to a number of reasons including: low co-payments and a longer supply (60 and 90 days) of refills. Close attention to both LDL measurement and treatment (if elevated) for patients with CHD is warranted for quality improvement within the VA.

### **National Lipid Clinical Reminders**

IHD-QUERI, in collaboration with the Office of Information Systems Design and Development Health Data Systems Group, developed two national electronic clinical reminders that were released to all VA medical facilities in a national Computerized Patient Record System (CPRS) software patch in May 2002. These reminders were designed to

improve adherence to secondary prevention guidelines for lipid management in patients with IHD. An evaluation of the effectiveness of the national IHD reminders is being conducted in VISN 19.

### **Cardioprotective Medication Use**

Secondary prevention in coronary heart disease can improve survival and reduce recurrent events. IHD-QUERI conducted a 'before and after' study of VA patients with documented CHD who had an acute myocardial infarction (AMI) to compare their cardioprotective medications before the AMI. Results showed that only half of VA patients with CHD, in VISN 20, were receiving prescribed cardioprotective medications before being hospitalized for an AMI. This suggests that instituting systematic measures to improve prescriptions for cardioprotective medications in high-risk outpatients who have CHD may help prevent adverse outcomes.

### **Assessment of ACS Patient Care**

A primary goal for IHD-QUERI is to improve quality of care as well as quality of life for veteran patients suffering from acute coronary syndrome (ACS). A total of 27% of the patients in the Access to Cardiology study had

## **The IHD-QUERI Executive Committee**

Each QUERI Executive Committee is co-chaired by a research expert and a clinician. The Acting Research Coordinator is **Anne Sales, PhD**, and the Clinical Coordinator is **Ken Morris, MD**. IHD-QUERI's Executive Committee includes other experts in the field of ischemic heart disease: Jeroan Allison, MD; Ross Fletcher, MD; Mary K. Goldstein, MD; Frederick Grover, MD; Karl Hammermeister, MD; Paul Allen Heidenreich, MD; Robert Jesse, MD; **Leslie Kinder, PhD** (co-Implementation Research Coordinator); Greg Larsen, MD; Laura Petersen, MD; Eric Peterson, MD; **Anne Sales, PhD, MSN**, (co-Implementation Research Coordinator); and Mark Starling, MD.

depressive symptoms following hospitalization for ACS. Another study comparing cardiac care between Medicare and the VA raised concerns about processes and outcomes of care for patients admitted to the VA health care system with a diagnosis of an AMI. In response, IHD-QUERI has proposed two studies in collaboration with the Office of Quality and Performance (OQP) and Patient Care Services (PCS), to utilize VA databases for the purpose of quality improvement for all VA patients with ACS. An important component of these studies will be the development of a repository that contains key data elements around the care of veteran patients with ACS.

### **Additional IHD-QUERI research**

- *The Cardiac Assessment, Reporting, and Tracking – Cath Lab (CART-CL):* A system to support detailed, prospective data collection in cath labs is essential because accurate risk assessment depends upon data not currently available within VA administrative databases. The CART-CL project is developing a software application and database to be integrated with CPRS to facilitate assessment of these outcomes.

- *Improving the Management of Chronic Stable Angina:* The goal of this project is to determine whether a collaborative care model results in improved control of angina and improved quality of life for patients with IHD who are managed in a primary care setting. This project will be conducted in the General Internal Medicine Clinics (GIMCs) in four VA Medical Centers: Denver, Palo Alto, Portland, and Puget Sound.
- *Patient Education:* In collaboration with Pfizer-Parke Davis Pharmaceuticals, IHD-QUERI is leading a patient education program in VISN 20 (Northwest Network) among high-risk patients in an effort to promote healthier lifestyles and behavior change. Patients receive monthly bulletins for 12 months. Patients also receive a monthly calendar and other materials designed to encourage their active participation in medical treatment, as well as information to help them modify their diet and exercise patterns to include healthier lifestyle choices.

## **Quality Enhancement Research Initiative**

QUERI currently focuses on nine conditions that are prevalent and high-risk among veteran patients: Chronic Heart Failure, Colorectal Cancer, Diabetes, HIV/AIDS, Ischemic Heart Disease, Mental Health, Spinal Cord Injury, Stroke, and Substance Use Disorders.

### **The QUERI Process**

The QUERI process includes six steps:

- 1) identify high-risk/high volume diseases or problems;
- 2) identify best practices;
- 3) define existing practice patterns and outcomes across VA and current variation from best practices;
- 4) identify and implement interventions to promote best practices;
- 5) document that best practices improve outcomes; and
- 6) document that outcomes are associated with improved health-related quality of life.

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**VA's Research and Development QUERI Website:** [www.hsr.d.research.va.gov/queri/](http://www.hsr.d.research.va.gov/queri/)  
**IHD-QUERI direct web link:** [www.appc1.va.gov/PS\\_IHDQuerier/](http://www.appc1.va.gov/PS_IHDQuerier/)