Ischemic Heart Disease: Prevalence and Costs

Ischemic heart disease (IHD) remains the single leading cause of morbidity and mortality in the U.S. among Veterans who use the VA healthcare system. Precise figures are not available on the prevalence of IHD among VA patients, however, more than 500,000 VA patients have a diagnosis of IHD, and it is a leading cause of mortality and hospitalization for Veterans. Each year, there are approximately 9,000 admissions for acute myocardial infarction (AMI) to VA healthcare facilities, and approximately 2,500 AMIs among Veterans admitted to VA facilities for other conditions (Unpublished, Cardiac Care Follow-up Clinical Study (CCFCS) data). In FY08, chronic IHD was the third most frequent discharge diagnosis for VA hospitalizations, accounting for 20,651 of 588,856 hospital discharges. Moreover, the annual cost of VA care for IHD is $3,187 per patient.

While the annual death rate attributable to IHD has declined by 40.4% between 1999 and 2009, death rates remain higher for males and African-Americans (relative to females and whites), and IHD remains the number one cause of death in men and women, accounting for 1 of every 6 deaths in the United States. In 2010, the total estimated cost (direct and indirect) of caring for patients with IHD in the U.S. exceeded $177 billion.

The Ischemic Heart Disease Quality Enhancement Research Initiative’s (IHD-QUERI) overall mission is to improve the quality of care and clinical outcomes for Veterans with IHD and Veterans at risk for IHD through identifying, assessing, and promoting implementation of evidence-based best practices; fostering collaboration among researchers and operational units; and advancing the sciences of evidence-based medicine and evidence-based management.

In its first decade, IHD-QUERI’s goals centered on discrete disease states, i.e., improving the quality of care and outcomes for patients with specific acute and/or chronic clinical conditions related to IHD. While those objectives remain integral to IHD-QUERI’s mission, several trends over the past five years have transformed current goals, including:

- Increased emphasis on assessing the effectiveness and safety of therapies (e.g., medications, devices, diagnostic testing) applied in clinical practice;
- Increased focus on improving systems of care as opposed to discrete episodes of care; and
- A shift to team-based, patient-centered, coordinated care.

Recognizing these trends, IHD-QUERI currently pursues two broad goals:

1. Leverage data stored in new and existing information systems to improve the quality and safety of care for IHD patients at point of service; and
2. Improve cardiovascular risk factor management by integrating new programs into systems of care.

Several IHD-QUERI projects that advance these goals include:

**Multifaceted Intervention for Clopidogrel Adherence**

Dr. Michael Ho is leading a multi-year hybrid effectiveness-implementation study to improve adherence to clopidogrel for Veterans who receive a coronary stent. Clopidogrel is a critical adjuvant therapy that reduces the risk of myocardial infarction and death, but is discontinued early in 30% of cases. This study is testing a successfully piloted multifaceted intervention that leverages the national Clinical Assessment Reporting and Tracking system (CART).

For more information, contact Dr. Ho at Michael.Ho@va.gov.

**Increasing Use of Radial-Access Coronary Procedures**

Drs. Christian Helfrich, Christopher Bryson, Sunil Rao and colleagues are conducting a multi-center implementation trial of a successfully-piloted intervention to increase the use of radial-access percutaneous coronary intervention (PCI) in VA, which can reduce major bleeding complications by 50%-70% in this common procedure. The trial includes a multifaceted formative evaluation to address potential barriers in real-time, as well as testing how participants’ perceptions of readiness to change are affected by the coaching intervention.

For more information, contact Dr. Helfrich at Christian.Helfrich@va.gov.
Evaluation of VA Specialty Care Transformational Initiatives

Under the leadership of Drs. Christian Helfrich and Michael Ho, IHD-QUERI is part of a national evaluation of VA’s Specialty Care Transformational Initiatives, which aim to provide new modalities and models for Veterans to access specialty care. Evaluation findings are helping inform VA’s Office of Specialty Care policy as the initiatives transition from isolated pilot programs to part of integrated, ongoing specialty care services.

For more information, contact Dr. Helfrich at Christian.Helfrich@va.gov.

How Do I Learn More?

For information about IHD-QUERI, contact:

G. Blake Wood, M.S.
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Tel: (206) 277-4167
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Web Resources

For more information about the QUERI program in general, and to link to all of the individual QUERI Centers, please go to www.queri.research.va.gov

The IHD-QUERI Executive Committee

Each QUERI Center is led by a research expert and a clinician. The Director of IHD-QUERI is Michael Ho, M.D., Ph.D., and the Co-Clinical Coordinators are Michael Ho, M.D., Ph.D., and Thomas Maddox, M.D., M.P.H.


References: