

New Stroke QUERI: Reducing Risks and Improving Outcomes

Stroke is one of the leading causes of disability in the United States and the third largest cause of death. On average, every 45 seconds an American has a stroke, every 3 minutes someone dies of stroke, and 15%-30% of stroke survivors have serious, long-term disability. The Veterans Health Administration (VHA) estimates that 15,000 veterans are hospitalized for new strokes each year – costing an estimated \$111 million for acute inpatient care, \$75 million for post acute inpatient care, and \$88 million for follow-up care over 6 months post-stroke.

Effective secondary prevention and rehabilitation interventions initiated early following stroke may reduce the risk of a second stroke, can enhance the recovery process and minimize functional disability. Improved functional outcomes for patients enhance quality of life and decrease long-term care expenditures. The mission of the new Stroke QUERI is to reduce stroke risk and maximize veterans' functional status and quality of life by

systematically implementing clinical research findings and evidence-based guidelines into routine clinical practice. To accomplish this, researchers at the Stroke QUERI focus on four primary goals.

The Veterans Health Administration estimates that 15,000 veterans are hospitalized for new strokes each year.

Goal 1: Improve overall compliance with VA and Department of Defense (DoD) clinical practice guidelines for stroke rehabilitation.

To meet this goal, investigators are working to identify baseline levels of VA clinical stroke guideline compliance through an existing Rehabilitation Research & Development funded project. Additionally, Stroke QUERI staff will collaborate with VHA's Employee Education Service (EES) program to promote implementation of evidence-based stroke guidelines. Projects will be developed to evaluate compliance with the newly created post-stroke rehabilitation guideline following the nationwide EES education program to determine its effectiveness. Based on that evalua-

tion, Stroke QUERI will modify future programming and processes to enhance implementation of the guidelines.

Goal 2: Ensure that rehabilitation is considered for all stroke patients.

Patients who have suffered a stroke that results in impairments and limited activities should be referred to rehabilitation services. VA guidelines strongly recommend that once the patient is medically stable, their primary physician consult rehabilitation services (i.e., physical therapy, occupational therapy, speech and language pathology), as indicated, to assess the patient's rehabilitation needs. A multidisciplinary assessment should then be undertaken, and patients in need of rehabilitation intervention should be referred to a specialist stroke rehabilitation team as soon as possible. Stroke QUERI will work to determine the proportion of stroke patients that receive this type of intervention and any variation in services across sites and settings of care.

Goal 3: Reduce the risk of stroke recurrence by assuring appropriate anticoagulation of stroke patients with atrial fibrillation.

Identification and specific treatment of risk factors must be an inte-

Continued on page 4

In This Issue

Director's Column	Page 2
Amputation Workshop	Page 3
Announcements and Upcoming Events	Page 3

Director's Column

In my 32 years of VA service, I've had the opportunity to be a part of many innovative and exciting programs aimed at improving health care to veterans. Managing



the Quality Enhancement Research Initiative (QUERI) for the past six years is definitely one of the highlights.

Through QUERI, health services researchers work to identify evidence-based best practices, analyze actual practice to identify gaps in quality/performance from best practices, and then

develop, implement, and evaluate improvement programs to eliminate those gaps. QUERI is uniquely positioned within VA to form the collaborative relationships necessary to address this challenge in a systematic fashion and at a national level.

QUERI provides a framework for researchers, clinicians, and managers to work together. Through collaborative efforts between research and operations, quality improvement efforts have been successful. Through such collaboration, the nine QUERI Coordinating Centers – one dedicated to each designated disease area – have identified the research evidence and developed interventions that were implemented in targeted VA facilities and networks. As a result, we have had some dramatic improvements in diabetes care, heart disease, mental health, and spinal cord injury, to name a few.

Evidence-based quality improvements have been accomplished at the facility level, the network level, and even across networks. How to do a system-wide national rollout has proven to be more challenging. We thought that once QUERI had shown that findings were effective, they would be incorporated into practice at the bedside. However, we have found that this is not necessarily the case. There are many pitfalls in translating

research into clinical practice, and we have learned many lessons. For example:

- Leadership is critical — without the facility director and/or the network director to serve as “champion,” translation simply does not work.
- A strong evidence-base is essential in order to successfully translate findings into clinical practice.
- Momentum is important; if possible, quickly identify barriers as well as strategies to overcome barriers — then keep the project moving.
- Flexibility is crucial. You have to be flexible and be able to improvise (formative evaluation), while still remaining rigorous.

We are very fortunate to work within an extensive integrated health care system that offers a large patient population and invaluable data resources. For these reasons, we are ahead of the private sector on many quality measures, and this has helped propel VA to the head of the field.

I am proud to have been a part of QUERI. It has helped heighten the awareness and importance of health services research and outcomes in general. It is my hope that as VA continues to strive toward a seamless quality improvement pipeline, the QUERI process will become a routine part of VA health care — providing the right care to the right patient at the right time.

As one who was there at the inception of this unique program, I look forward to QUERI's continued growth and success under new HSR&D and QUERI leadership.

John G. Demakis, MD
QUERI Director

QUERI Collaborates with VA Rehabilitation Research & Development on Amputations

As a result of ongoing conflicts in Iraq and Afghanistan, a number of military personnel are returning home with major limb loss. The Veterans Health Administration (VHA) is committed to providing the highest level of care to all new veterans who have suffered traumatic amputations. As part of VHA's overall effort to meet this critical need, its Office of Research and Development (ORD) has issued a series of solicitations aimed at research to improve the quality and outcomes of VA healthcare delivered to amputees. These solicitations are part of a broader portfolio of activities designed to facilitate essential research, and enhance the quality and outcomes of amputee healthcare by systematically implementing evidence-based research findings into routine clinical practice.

Among the new solicitations is a joint announcement from VHA's Rehabilitation Research and Development (RR&D) Service and

the Health Services Research and Development (HSR&D) Service to establish a new QUERI Center on Amputations. To better identify the needed focus and activities of the proposed QUERI Center, ORD hosted a two-day agenda-setting workshop on amputations on May 19 and 20, 2004. The invitation-only workshop titled "Setting the Agenda for Evidence-Based Best Practices and Quality Improvement Efforts" brought together VA clinical rehabilitation experts, QUERI researchers, and non-VA experts.

Through a series of plenary and working group sessions, participants worked toward summarizing research and knowledge regarding current VA clinical practices, and examined research and knowledge gaps regarding health care for traumatic amputations. The QUERI process was discussed, and participants began to apply this process to amputation-related issues. Sessions and working groups then focused on specific issues

such as access to care, prescriptions for prostheses, prosthesis fitting, rehabilitation, and important secondary issues (comorbidities, complications, and psychosocial issues).

This timely workshop will help participants to develop detailed plans for research and quality improvement projects designed to improve VA care for traumatic amputations. Workshop products are expected to include a detailed research agenda and preliminary plans for the proposed Amputations QUERI Center. In addition, recommendations for VA healthcare operations leaders will be proposed to help them assess and improve care in parallel with the research efforts.

Readers interested in learning more about the QUERI amputations solicitation, QUERI in general, or other ORD funding opportunities, please visit the ORD website at www.va.gov/resdev.

Announcements and Upcoming Events

▶ QUERI's *Research and Methodology (R&M) Committee* convened recently to review the Strategic and Translation plans developed by each of the QUERI Coordinating Centers. The Coordinating Centers are responsible for the implementation, program coordination, and ongoing management of the QUERI process. The R&M Committee – comprised of senior VA leaders with experience in research, clinical, operational, and policy issues – also helps the Centers set new goals that will advance QUERI's mission and VA's broader quality enhancement agenda. Overall, plans were given enthusiastic approval, with constructive guidance for further enhancement.

▶ Increasing efforts to participate in *important health care conferences* is part of QUERI's broader goal to strengthen dissemination and collaboration activities. QUERI will be well represented at several conferences and meetings, such as AcademyHealth's Annual Meeting held in San Diego on June 6-8, and the "Translating Research into Practice (TRIP)" conference to be held in Washington, DC from July 12-14. The TRIP conference is co-sponsored by VA HSR&D. Additional information regarding HSR&D/QUERI participation in this year's TRIP meeting is available from Jeff Smith, PhD, Implementation Research Coordinator for the Mental Health QUERI (e-mail at Jeffrey.Smith6@med.va.gov).

Stroke QUERI

Continued from page 1

gral part of any plan for stroke rehabilitation and recovery, and generally extends from around the period of acute hospitalization and initiation of rehabilitation, extending indefinitely. For warfarin (an anticoagulant) treatment, this includes ongoing monitoring.

Multiple high-quality randomized trials have indicated that warfarin is the clear treatment of choice for stroke prevention among most patients with atrial fibrillation, particularly for individuals with prior stroke. If well monitored, anticoagulation with warfarin could prevent more than half of the strokes related to atrial fibrillation at the risk of a relatively small number of major bleeding complications. Further, cost-benefit analyses clearly demonstrate that this is a cost-effective strategy.

After defining existing practice patterns in the VA and variations from best practices in anticoagulation of stroke patients with atrial fibrillation, investigators will identify patient and site characteristics that

predict appropriate anticoagulation practices that could form the foundation for implementation.

Goal 4: Reduce the physical, emotional, and social burden of depression after stroke.

Post-stroke depression (PSD) occurs in 25% to 40% of ischemic stroke (caused by blocked blood vessel or artery) survivors, and is associated with worse functional outcomes, quality of life, and increased post-stroke mortality. The Stroke QUERI will facilitate the measurement and diagnosis of quality and performance gaps for detecting and managing this condition.

Specifically, investigators will:

- Determine the proportion of veterans with stroke who are diagnosed and treated for PSD within the first 12 months after stroke;
- Identify which providers are most likely to encounter, and thus be in a position to screen, post-stroke patients for depression;
- Assess the treatment patterns for patients diagnosed with PSD; and
- Analyze the compliance to evidence-based antidepressant treatment in veterans with stroke.

Ultimately, the goal is to develop a multidisciplinary implementation strategy to improve the screening, diagnosis, and appropriate treatment of PSD.

A long-term goal of Stroke QUERI is to expand the scope of the research portfolio to include other secondary prevention measures and early phases of stroke care.

The Stroke QUERI was established this Spring with leadership from Pamela Duncan, PhD, FAPTA (Research Coordinator) in Gainesville, Florida and Linda S. Williams, MD (Clinical Coordinator) in Indianapolis, Indiana, in collaboration with a national network of investigators, clinicians, decision-makers, and consumers. For more information about this new QUERI group, visit their website at www.va.gov/stroke-queri.

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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 nine conditions due to their high volume and/or high risk among VA patients: chronic heart failure, colorectal cancer, diabetes, HIV/AIDS, ischemic heart failure, mental health, spinal cord injury, stroke, and substance use disorders. *QUERI Quarterly* is available on the web at www.hsrd.research.va.gov/publications/queri_quarterly/

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QUERI *Submission Deadline*

QUERI Quarterly is glad to accept submissions for publication consideration. Please submit articles, updates or other information of interest to our readers by **Monday, August 2, 2004** for publication in our September issue. Submit to Diane Hanks at diane.hanks@med.va.gov.