In 2009, the structure and quality of VHA acute stroke care was evaluated through the Office of Quality and Performance/Stroke-QUERI Acute Stroke Care Special Project and the VHA Emergency Department and Urgent Care Clinic Stroke Survey. Key findings from the OQP Stroke Special Study included the finding that early stroke care indicators, compared to indicators that measured later hospital care or processes at discharge, had great room for improvement. Specifically, national mean passing rates were lower than desired for measures of NIH Stroke Scale completion (28%), dysphagia screening prior to oral intake (23%), and tPA (tissue Plasminogen Activator, clotting agent) given to eligible patients (8%).

Taking all three early indicators together in a composite score (number of passes/number of opportunities), passing rates for early indicators of high-quality stroke care (25%) were lower than in-hospital indicators (87%) and discharge indicators (73%). Further analysis showed that equipped VA Emergency Departments did not have significantly higher quality of thrombolysis compared to non-equipped EDs.

VHA Acute Ischemic Stroke Directive

In response to these findings, Dr. Gary Tyndall, the National VHA Emergency Department Director, organized the VHA Acute Stroke Taskforce to guide the development of a national VHA Acute Ischemic Stroke (AIS) Directive. Partnering with Stroke-QUERI investigators, as well as representatives from VA Neurology, ED, Nursing, Speech Language Pathology, and other groups, the Taskforce developed the AIS Directive with the primary aim of improving access to and quality of acute stroke care. The AIS Directive organized recommendations around facility requirements, consent for thrombolysis, templates and clinical pathways to promote high quality care, and Veteran and staff education.

In November 2011, the “Treatment of Acute Ischemic Stroke (AIS), VHA Directive 2011-038” was released across VHA. The Directive instructs all VAMCs with inpatient acute care to designate their ability to provide thrombolysis for AIS. Each VAMC will be designated as a VHA Primary Stroke Center, VHA Limited Hours Stroke Facility, or a VHA Supporting Stroke Facility based on necessary personnel, infrastructure, expertise, and programs to diagnose/treat Veterans with AIS. Facilities not able to provide AIS care must have a formal policy for rapid transfer of Veterans to a facility with this capability. The Directive also requires the measurement of three inpatient stroke quality indicators by all VAMCs with inpatient acute care beds:

- Completion of the NIH Stroke Scale,
- Dysphagia screen prior to oral intake, and
- Provision of thrombolysis to eligible patients.

All facilities were required to develop and implement their policy to organize and deliver appropriate AIS care by June 1, 2012.

IPEC Stroke Quality Indicators

Beginning in July 2012, VA facilities were required to submit monthly reports about the number of Veterans admitted with ischemic stroke, and to provide aggregate data about eligibility and passing rates for the three AIS Directive indicators: 1) thrombolysis for eligible patients, 2) NIH Stroke Scale documentation, and 3) dysphagia screening before oral intake. The AIS Task Force worked with VAs Inpatient Evaluation Center (IPEC) to develop a web-based stroke data module that records these data.

For the first full year of reporting (FY 2013), approximately one-third of VA facilities reported stroke data for 1,885 Veterans with ischemic stroke. Performance on the three indicators was substantially higher than that found in the FY2007 OQP Stroke Special Study: Thrombolysis for eligible patients, 78% vs. 8%; NIH Stroke Scale documented, 75% vs. 28%; and Dysphagia Screening before Oral Intake, 72% vs. 23%.

Efforts are ongoing via monthly Stroke Quality Improvement Network conference calls, led by Stroke-QUERI, and via partnerships with Neurology and Emergency Medicine clinical offices to increase the number of facilities reporting and using these data for local improvements in stroke care. Additional Stroke-QUERI work, in partnership with the Office of Clinical Analytics and Reporting, is evaluating...
the validity of electronic measurement of these and other stroke process of care measures to facilitate local review of these data by VA stroke teams.

Promoting Optimal National Stroke Care

Ongoing research to continue promoting national stroke care improvement and to assess the impact of the National AIS Directive includes a recently completed multi-site randomized trial to improve dysphagia screening and DVT prophylaxis, as well as a qualitative assessment of facility organizational responses to the AIS Directive. In FY 15, Stroke-QUERI will launch a new implementation intervention aimed at training nurse-speech pathologist dyads to improve Emergency Department-based dysphagia screening for all stroke patients.

How Do I Learn More?

To learn more about this directive, please contact:

Jennifer Myers, M.S.W.
E-mail: Jennifer.Myers@va.gov

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

Stroke-QUERI looks forward to continuing work with its partners in Neurology, Emergency Medicine, and Specialty Care, as they seek to improve inpatient care for Veterans with acute ischemic stroke.

For more information, the new VHA AIS Directive is available at (VA Intranet only): vaww.infoshare.va.gov/sites/MedicalSurgical/strokecare/Shared%20Documents/Forms/AllItems.aspx


The Stroke-QUERI Executive Committee

Each QUERI Center is led by a research expert and a clinician. The Research Coordinator for Stroke-QUERI is Linda Williams, M.D.; the Clinical Coordinator is Dawn Bravata, M.D., the Co-Clinical Coordinator is Glenn Graham, M.D., and the Implementation Research Coordinator is Teresa Damush, Ph.D. The membership of the Stroke-QUERI Executive Committee includes: Barbara Vickrey, M.D., M.P.H. (Chair); Pamela Duncan, Ph.D.; Thomas Kent, M.D.; Sarah Krein, Ph.D., R.N.; David Matchar, M.D.; Brian Mittman, Ph.D.; Don and Jan Prether; Mathew Reeves, Ph.D.; and Robert Ruff, M.D.