Improving Knowledge and Information Sharing to Promote Best Practices in Stroke Care: Evaluation of the VA Stroke QUERI Toolkit

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ABSTRACT

Despite many advances in stroke care treatment, there is substantial room for improvement in quality of care for stroke patients. In an attempt to disseminate up-to-date quality information and evidence-based best practices of stroke care, the Veterans Health Administration (VHA) and the VHA Stroke QUERI implemented an innovative web-based toolkit tailored for providers and program planners interested in improving stroke care quality. This study evaluated the VA Stroke QUERI Toolkit to determine its most useful aspects and those that require improvement. In-depth qualitative interviews (n = 48) were conducted with a geographically dispersed sample of clinicians and program planners throughout the VHA system. Findings suggest the Stroke QUERI toolkit was perceived as an effective, efficient and user-friendly site but knowledge of the toolkit continues to be initiated and shared mainly through individuals and small groups. To achieve greater impact a comprehensive set of strategies designed to encourage broader uptake is required.

Keywords: Evaluation, Qualitative Methods, Quality of Care, Stroke, Toolkits

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INTRODUCTION

Stroke is a major health issue in the United States (Rosamond et al., 2007). There are nearly 700,000 ischemic strokes in the United States each year, and the annual cost to the nation exceeds 57 billion dollars (Arling et al., 2012). Stroke is the third leading cause of death and the leading cause of disability in the USA (Arling et al., 2012). The Veterans Health Administration (VHA), which is part of the US Department of Veterans Affairs (VA), is the largest healthcare system in the United States and has a record of providing high quality care. There are approximately 17,000 patients treated for stroke each year within the VHA. Stroke is a very costly medical diagnosis in the VA, with a total VA cost of stroke treatment at $315 million annually, and with a cost per patient over $18,000 (Arling et al., 2012). In short, stroke is a public health concern both within and outside of the VA and delivery of high quality care has significant financial implications.

Despite many advances in prevention and acute management of stroke, there is substantial room for improvement in the quality of stroke care provided to individuals who experience a stroke. Wide variation in acute stroke care includes under-use of established therapies (e.g., anticoagulation for atrial fibrillation), over-use of unproved therapies (e.g., intravenous anticoagulation), and misuse of therapies (e.g., errors in the administration of thrombolytic therapy) (Bravata et al., 2002; Katzan et al., 2000; Reeves et al., 2005). High quality care for acute stroke includes use of tPA within the first three hours of stroke onset, DVT prophylaxis, discharge on warfarin inpatients with atrial fibrillation, lipid-lowering drugs in patients with hyperlipidemia and education about smoking cessation (Adams et al., 2007; Deng et al., 2006; LaBresh et al. 2008; Liang et al., 2008). Several organizations, including the Joint Commission (JC), the American Academy of Neurology (AAN), and the American Heart Association (AHA), have worked together in the last few years to develop a coordinated set of quality indicators included in “Get with the Guidelines” (see Adams et al., 2008; Bates et al., 2005; Schwamm et al., 2009) for acute stroke care processes that encompass these general domains (i.e., use of tPA, DVT prophylaxis, smoking education, etc). To that end, the VA has embraced these same quality indicators and has implemented them as measures of good quality of care.

Healthcare organizations continue to develop and implement process improvement initiatives to improve quality. As evidence of this commitment to quality, in 1998 the VA created the Quality Enhanced Research Initiative (QUERI) program that employs processes to diagnose gaps in performance and implement programs and interventions to improve quality (Stroke Quality Enhancement Research Initiative 2012). Continuous quality improvement (CQI) methodologies have been employed to make improvements in healthcare delivery systems. Among other things, CQI modalities engage clinicians and management staff with information (which often times involves evidence-based clinical practice guidelines) and cycles of learning to help them make timely informed decisions based on immediate process measurements (Berwick, 1989; Speroff et al., 2011; Stoeckle-Roberts et al., 2006). The proper uses of learning technologies, including web-based toolkits, are broadly considered as being an integral aspect of the establishment and distribution of learning materials (Bonner, 2010; Collison & Parcell, 2001; Kirchner et al., 2012; Ramalingam, 2006). One approach that has been rarely used as part of the organization’s overall process improvement effort is the use of a toolkit, which is an interactive module covering standard quality related topics and the latest information customized to the needs of practicing clinicians to aid in their prompt decision-making (Speroff et al., 2011). Intuitively, toolkits could be used as a vehicle to improve quality and some organizations have called for straightforward methods of disseminating toolkits as a strategy for change (Eagle et al., 2002; Speroff et al., 2011).

In one attempt to better address these gaps in quality and to better identify factors that may improve quality, the VA Stroke QUERI estab-
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