

*Stroke is the third leading cause of death and is the leading cause of long-term disability. Moreover, stroke survivors are at risk for recurrent stroke. Currently in the VA, there are no systematic interventions or implementation strategies developed to reduce stroke risk. Yet, educating veterans with stroke or TIA on stroke risk reduction is mandated by the VA/Department of Defense (DoD) stroke rehabilitation guidelines, championed by the American Stroke Association, and recommended by the JCAHO criteria for stroke care.*

## Adapting Tools to Implement Stroke Risk Management to Veterans

Dr. Teresa Damush (Principal Investigator), Implementation Research Coordinator, and Dr. Linda Williams (Co-Principal Investigator), Clinical Coordinator of the Stroke QUERI, recently received HSRD funding from the Implementation Study section to adapt and implement existing tools to reduce secondary risk for stroke in the VA. Dr. Thomas Kent, Director of the Stroke Center, serves as the Houston VAMC site Principal Investigator.

The objectives of this proposal are to:

- 1) Conduct a formative evaluation of stroke patients, their providers, and the hospital discharge process to understand the barriers and facilitators of activating veterans with recent stroke or TIA through peer support to improve control of stroke risk factors, provide feedback on how best to adapt existing stroke prevention tools to veterans and the VHA system of healthcare, and develop an implementation strategy based on this feedback; and
- 2) Conduct a feasibility test of the adapted stroke prevention program and implementation strategy.

The funded HSRD Implementation study is a dual-site (Indianapolis and Houston VAMC) feasibility implementation study incorporating qualitative and quantitative data to inform the adaptation of existing stroke prevention tools through peer support to the VA and to test the feasibility of an implementation strategy.

To accomplish these aims, the team will conduct focus groups of veteran stroke and TIA patients and semi-structured interviews of VA providers of stroke care (physicians, nurses and therapists) to inform how the program can best be integrated into the existing systems of care. Major themes of facilitators and barriers to stroke risk factor management will be identified from the qualitative data analyses. Next, existing stroke risk factor management tools will be adapted using a stroke expert panel, the Executive Committee of the Stroke QUERI, and a panel of stroke patients and caregivers.

Finally, the feasibility of an adapted stroke risk factor management program will be tested. In this pilot, 160 veteran stroke survivors will be randomly assigned to either the VA Stroke Risk Management program or usual care. Veterans will receive a 3-month intervention and be assessed at baseline, 3, and 6 months. Primary outcomes are stroke risk factor management by patients (i.e., physical activity participation; diet modifications). Secondary outcomes are stroke survivor health-related quality of life; the Functional Impairment Measure; depression; self-efficacy to manage risk factors; outcome expectations; and stroke knowledge.

A comparison between the intervention and usual care group will be analyzed on the primary and secondary outcomes. Next, focus groups and semi-structured interviews will be conducted as part of

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the formative evaluation to identify barriers and facilitators of the program through qualitative analyses to inform future program implementation.

This study will: 1) develop an evidence-based implementation strategy to adapt existing stroke tools for stroke prevention in

the VA; and 2) estimate the effect size to test the impact of a future regional and national roll-out. In doing so, the team will assist the VA with compliance to VA/DoD and JCAHO stroke care guidelines. Increased guideline compliance will ultimately lead to a reduction in the occurrence of stroke and an improvement in veterans' health-related quality of life.

## How Do I Learn More?

If you are interested in learning more about this project, please contact:

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## Web Resources

For more information about the Stroke-QUERI Center, visit their website at:

**[www1.va.gov/stroke-queri](http://www1.va.gov/stroke-queri)**

For more information about the QUERI program in general, visit the national QUERI website at:

**[www.hsrd.research.va.gov/queri](http://www.hsrd.research.va.gov/queri)**

## The Stroke-QUERI Executive Committee

Each QUERI Executive Committee is led by a research expert and a clinician. The research coordinator for Stroke-QUERI is **Linda Williams, MD**, and the clinical coordinator is **Dawn Bravata, MD**. This executive committee includes experts in the fields of stroke and implementation science. The membership of the Stroke-QUERI Executive Committee includes: **David Matchar, MD** (Chair); Bradley Doebbeling, MD, MSc; Pamela Duncan, PhD, PT; **Linda Hershey, MD** (Co-Clinical Coordinator); Thomas Kent, MD; Sarah Krein, PhD, RN; Dennis Milne; Brian Mittman, PhD; Lynnette Nilan, RN, EdD; Eugene Oddone, MD; Diana Ordin, MD; Don and Jan Prether; Robert Ruff, MD; Barbara Sigford, PhD, MD; and Marita Titler, PhD, RN, FAAN.