Reducing Risk Factors of Stroke Patients after Discharge

Clinical support and lifestyle changes are important strategies to impact modifiable risk factors for patients who have been hospitalized after a stroke. As a Comprehensive Stroke Center (CSC), University of Wisconsin (UW) Hospital in Madison provides individualized stroke education for patients who experience a stroke. A dedicated nursing team at UW, led by Niki Bennett and Melanie McCauley, took that education a step further by implementing a quality improvement project to further engage patients on healthy lifestyle changes for secondary stroke prevention.

The project, informed by a similar patient education and goal-setting process for patients with diabetes, provides continued education for stroke patients on reducing the risk factors for a stroke following discharge from the hospital. Specialized education starts during the inpatient stay for a stroke and continues with follow-up calls from nurses and outpatient stroke clinic visits. The follow-up calls and outpatient clinic visits track risk factor reduction progress and provide additional support to the patient.

Implementation of the new process was multifaceted. During the hospital stay and prior to patient discharge, the stroke team, including doctors, nurses, and other health care providers, educate patients about their risk factors for stroke. The nurse then, using motivational interviewing strategies, assists the patient with selecting one risk factor to work on (for example, blood pressure control) and supports them in setting a goal to address that risk factor. Upon discharge, the patient additionally receives a red tote bag with educational and lifestyle change resources (for example, water bottle, activity tracker, blood pressure cuff).

Continued education and follow-up calls are also integral to the new process. Hospital staff found patients tended to be very overwhelmed and did not always hear or assimilate their individualized stroke education during the inpatient stay. The follow-up calls and clinic visits determine if the patient is following through with their set goal, and provides opportunities to discuss the barriers to reaching the goal. The follow-up calls also reinforce the content discussed during the inpatient stay to assist the patient in meeting their goal.

Also critical to this process is the involvement of the patients as an active participant to choose a risk factor and decide on a goal that’s achievable and realistic to them. According to project leader, Niki Bennett, “Choosing a goal is not necessarily about what the nurse thinks is important. It’s having the patient evaluate their risk factors and say, ‘What can I really accomplish and how can I do that?’” Nurses utilize motivational interviewing techniques to help with this process.

Though it is too early for evaluation of outcomes and risk factor reduction data, UW staff is actively tracking patient progress. Of the patients who participated in this risk factor reduction and goal-setting process, 50% are continuing to work on and are making active progress to achieve their goal following hospital discharge.
Lessons Learned

Patients appreciate being active participants in the goal-setting process. Continued education and support from nursing staff help patients stay on track to work toward their goals and reduce targeted risk factors.

Multiple points of contact for patient education are also critical to the process. Taking in new information during the inpatient stay alone is often difficult due to the overwhelming and serious nature of hospitalizations.

Success Factors

Patients are active participants in the goal-setting process, which results in goals that are achievable and realistic. They decide what they can reasonably accomplish and create a plan to achieve their goal.

Patients receive secondary stroke prevention and patient risk factor education through use of educational materials and lifestyle change resources (for example, water bottles, activity trackers, pedometers) in a “red bag” that patients receive upon discharge.

Buy-in and engagement from staff at both inpatient and outpatient levels. Staff was trained to provide healthy behavior education. They are motivated to improve secondary stroke prevention for patients.

Adopting changes to electronic medical records (EMR) to allow for sharing of patient goal progress and education received across all patient encounters.

Barriers and Challenges

Fitting the goal setting process into a fast-paced environment. Patient goal setting can be very time consuming, complex, and difficult to view across care encounters.

Adapting to changes in nursing practice. Motivational interviewing techniques take time to learn and are challenging to adapt and incorporate into daily nursing practice.

Maintaining Success

Buy-in from nurses to complete assessments of behavior change in addition to standard inpatient protocol is important to continued success.

Training additional staff in motivational interviewing techniques will provide additional opportunity to reach more patients.

Acquiring sustainable funding to supply tote bags with educational and lifestyle change resources upon discharge.

Wisconsin Coverdell Stroke Program

The Wisconsin Coverdell Stroke Program works with hospitals, emergency medical services (EMS), and professional organizations across the state to support a healthier Wisconsin by improving community awareness and the quality of stroke care. Wisconsin EMS agencies and hospitals of all types and sizes are invited to be part of the Wisconsin Coverdell Stroke Program. For more information, please visit the Wisconsin Coverdell Stroke Program’s website.