

## Development and Evaluation of a Stroke Education Quality Improvement Initiative

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**Nature and scope of the project:** Stroke is the leading cause of disability and fifth leading cause of death in the United States, though preventable in 80% of cases. One in four stroke patients will have a recurrent stroke, which may lead to lifelong deficits impacting quality of life and independence. A standardized stroke patient education protocol was developed and implemented to improve patient stroke education through improved nurse education.

**Synthesis and analysis of supporting literature:** Patient and caregiver stroke education in the inpatient setting has proven to be an effective way to prevent a recurrent stroke, prevent hospital readmission, and improve patient outcomes. Significant nurse education has been found to improve patient stroke education to nearly 100%. A multifaceted approach has been found to effectively educate nurses working on stroke units.

**Project implementation:** Stroke education was provided to 29 neurological-trauma unit Registered Nurses (RNs) through an evidence-based protocol developed by the project lead. A poster with the developed protocol was placed in the staff break room and left for review for 3 months.

**Evaluation criteria:** A pre/post-test was developed and administered to 19 RNs to evaluate improvement in stroke education knowledge. Review of stroke patient charts was conducted to determine the occurrence of patient stroke education meeting the mandated requirements.

**Outcomes:** There was a statistically significant improvement in nurse education that was determined through a paired t test. 67% of nurses reported using the Stroke Inpatient Education Protocol with 50% of them finding this tool helpful. Stroke education on the unit stroke was improved from 35% to 63% but did not meet the goal of 80%.

**Recommendations:** Providing nurses with adequate patient stroke education is necessary to improve stroke patient outcomes. Continued education for RNs should be provided in a variety of ways to achieve improved nurse stroke education. This education should be provided at regular intervals to ensure retention.