

REINFORCING THE TEACH-BACK METHOD FOR NURSES PROVIDING STROKE  
PATIENT EDUCATION

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**Title**

Reinforcing the Teach-Back Method for Nurses Providing Stroke Patient  
Education

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## **ABSTRACT**

Literature indicates an opportunity to improve the stroke patient education experience. Enhancing stroke education for nurses is a method by which the patient education experience may be improved. The purpose of the problem-solving project is to provide educational sessions for nurses who have experience in caring for stroke patients and who have received prior education on utilization of the teach-back method. Analysis of the problem solving project helps gain understanding of what demographic factors play a role in nurses' perceived usefulness of the teaching session. Identifying common demographic factors of nurses' perceived usefulness will allow nurse educators to direct education efforts toward those groups which demonstrate a lack of understanding regarding the topic presented. The problem solving project was guided by the conceptual framework of Orem's Self-Care Deficit Nursing Theory.

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## **CHAPTER 1. PROBLEM AND ITS ENVIRONMENTAL CONTEXT**

### **Incidence of Stroke**

Despite advances in the treatment of acute ischemic stroke with the use of medical therapy and technology, the incidence of stroke remains high. An estimated 795,000 people in the United States have a stroke each year and an estimated 610,000 of those are first time or new strokes (American Stroke Association, 2013). Approximately 185,000 people who survive their first stroke go on to have another stroke. Worldwide, approximately 16 million people suffer from a first-time stroke each year causing 5.7 million deaths (Di Carlo, 2009). Stroke is the fourth leading cause of death in the United States (Centers for Disease Prevention and Control, 2013). It is also a leading cause of serious long-term disability and has an enormous financial encumbrance associated with post-stroke care. The burden of stroke in America is widespread; someone has a stroke about every 40 seconds and every four minutes someone dies of a stroke (American Stroke Association, 2013).

The forecast for an increase in the incidence of stroke is alarming. The American Heart Association (AHA) predicts that over the next 20 years the incidence of stroke will rise markedly. By the year 2030 the AHA projects that an additional 3.4 million people will have a stroke each year (American Heart Association, 2013). It is expected that Americans age 45-64 years old will have the highest increase in stroke incidence and that stroke costs will more than double in the next 20 years, going from 71.6 billion dollars in the year 2010 to 183.1 billion dollars by the year 2030. In order to combat the projected increase in the incidence of stroke, healthcare professionals must act now to develop health promotion and disease prevention strategies.



## **Stroke Prevention and Patient Education**

Contrary to popular belief, stroke is largely preventable. Lifestyle modifications, medication adherence and proper medical care can all assist in reducing the risk of initial and recurrent stroke. Stroke patient education and secondary stroke prevention strategies must rise to the forefront of nursing efforts in order to reduce the risk of stroke. Hospitalized stroke patients need information on methods to reduce their risk of subsequent stroke thereby reducing the likelihood of re-hospitalization due to recurrent stroke. Secondary stroke prevention strategies are an important component in reducing the incidence of stroke. Patient education plays a key role in the battle against the incidence of stroke and recurrent stroke (The Joint Commission, 2013).

The Centers for Medicare and Medicaid Services (CMS) is a large proponent of patient education. As a result of new CMS regulations that penalize hospitals with excessive patient readmission rates, administrators are searching for strategies to assist in preventing readmissions (Malcolm, 2012). Patient education has the potential to reduce the recurrent risk of stroke thereby reducing the incidence of hospital readmissions. It is a powerful tool that must be utilized to the fullest extent to promote health, reduce disease and disparity and reduce hospital readmission rates.

To fully capture the potential of patient education, healthcare professionals must ensure that the content being taught is understood and retained. Healthcare professionals need to assess their patients' health literacy levels to determine the extent to which patients understand what they need to do in order to take care of their health. The teach-back method is one strategy that, when utilized correctly, can positively impact patient learning and retention. Teach-back is a simple mechanism by which a patient's understanding of a concept or topic may be assessed

(Iowa Healthcare Collaborative, 2013). Simply stated, teach-back is assessing a patient's understanding by asking them to restate or "teach back" what he or she is supposed to know. All nurses at Essentia Health, a Midwestern hospital with Primary Stroke Center certification, have undergone mandatory training in the use of the teach-back. The need for follow-up instruction on teach-back is based on anecdotal evidence from nurse educators and nursing supervisors at Essentia Health who believe that since there have not been any follow-up teaching sessions on the implementation and use of teach-back, it is not a widely utilized teaching method within the organization. Additionally, the teach-back method has not been demonstrated specifically for use with stroke patients.

### **Purpose**

The purpose of the problem-solving project is to provide educational sessions for nurses who have experience in caring for stroke patients and who have received prior education on utilization of the teach-back method.

### **Definitions**

**Stroke.** A term used to describe cerebrovascular events that result in a localized area of brain infarction (Copstead & Banasik, 2010). Strokes are classified into two categories, either ischemic or hemorrhagic, based on pathophysiology. Ischemic strokes represent 88% of all strokes and result from sudden occlusion of a cerebral artery secondary to thrombus formation or embolization. Acute ischemia occurs when a cerebral artery is suddenly blocked resulting in insufficient blood flow to brain tissue. After only one minute of oxygen deprivation to the brain tissue, irreversible cellular injury can occur. Infarction and necrosis occur in the localized area of the stroke if the blockage persists. Hemorrhagic strokes account for the remaining 12% of all strokes and are the result of a hemorrhage either within the parenchyma of the brain

(intracerebral hemorrhage) or a hemorrhage under the arachnoid membrane and above the pia mater (subarachnoid hemorrhage) (Copstead & Banasik, 2010). Hemorrhagic strokes carry a higher incidence of morbidity and mortality due to the degree of secondary injury as a result of increased intracranial pressure, and brain distortion and shift (Copstead & Banasik, 2010).

**Secondary stroke.** A recurrent stroke that is experienced after a previous stroke (National Stroke Association, 2012).

**Transient ischemic attack (TIA).** A brief episode of neurological dysfunction resulting from focal cerebral ischemia not associated with permanent cerebral infarction (Easton, et al., 2009). Typically, symptoms of a TIA last only minutes, but may last up to 24 hours. Up to 40% percent of people who experience a TIA will go on to have a stroke (National Stroke Association, 2013).

**Health literacy.** The ability to obtain, process and understand basic health information and services needed to make appropriate decisions (AHRQ, 2010a). The Agency for Healthcare Research and Quality (AHRQ) cites that over one third of patients have inadequate health literacy, resulting in poor understanding of what they need to do to take care of their health. Limited health literacy is related to poor management of chronic diseases, poor capacity to understand and adhere to medication regimes, increased hospitalizations, and poor health outcomes (AHRQ, 2010a). The American Medical Association broadly defined health literacy as the ability to read and understand essential health information in order to achieve positive health outcomes (American Medical Association, 1999). Teach-back should be used with every patient regardless of factors such as health literacy, education level, language or age in order to promote greater patient satisfaction and ensure better adherence to treatment plans with better health outcomes for patients (Iowa Healthcare Collaborative, 2013).

## **CHAPTER 2. LITERATURE REVIEW**

### **Introduction**

A literature review was conducted to determine the significance of stroke patient education. The information provided in this chapter is divided into separate sections which include (a) the impact of stroke patient education, (b) nurse-provided patient education and its key role in overall patient outcomes, (c) nursing use of a teaching strategy that promotes learning and retention, (d) assumptions about the problem-solving project, (e) Orem's Theory of Self-Care Deficit as a theoretical construct, and (f) conceptual underpinnings of teach-back.

### **The Impact of Stroke Patient Education**

Patient education is a dynamic process that eliminates health-related problems, improves health and enables the patient to adopt behavioral changes to live in a healthy way (Avsar & Kasicki, 2011). Health education is aimed at the acquisition of skills and attitudes to change behaviors that influence health, lead to a modification of risk factors and to a decrease in disability and fatality from stroke (Maasland, Brouwer-Goossensen, den Hertog, Koudstaal, & Dippel, 2011). In recent years, there has been increased emphasis on patient education as an integral component of healthcare and on the healthcare professional's responsibility to ensure that patient education is effectively provided. There has been increased recognition linking the adverse effects of poor patient education with noncompliance, reduced health outcomes and reduced patient satisfaction (Bartleson, 2009).

Maasland et al. (2011) performed a comprehensive review of stroke-related health education. The authors of the comprehensive review identified four benefits of health education. First, it improves stroke risk reduction by promoting compliance and healthy behavior. Second, health education aims to improve patients' and caregivers' understanding of their health status

and treatment options. Third, it facilitates interactive communication between healthcare providers and patients and enhances patient participation in continuing care. Fourth, it is considered necessary for prevention, because it is assumed that the more people know about their disease and associated risk factors, the more willing they are to change their behaviors in order to reduce the risk of future stroke events.

Stroke education plays a crucial role in secondary stroke prevention (Hoffman, McKenna, Herd, & Wearing, 2007). The lack of proper education and information retention by the patient after a stroke may increase the likelihood that they will not seek care promptly if they experience signs and symptoms of a stroke in the future, causing a detrimental delay in care (Byers, Lamanna, & Rosenberg, 2010). Research shows that prompt treatment of ischemic stroke improves clinical outcomes if the treatment is administered within the first 3 to 4.5 hours from the onset of stroke symptoms for intravenous fibrinolytic therapy or within the first 8 hours from the first onset of stroke symptoms for endovascular therapy (Jauch, et al., 2013). The fact that 185,000 Americans who suffer from a first-time stroke go on to experience a subsequent stroke further indicates the need for targeted stroke education regarding health promotion and disease prevention. Information provided after a stroke can improve patient and family members' knowledge of stroke and increase their satisfaction, therefore improving overall patient outcomes (Smith et al., 2008). In order to promote secondary stroke prevention and reduce the devastating effects of stroke, proper education must be provided to all stroke patients to ensure the best possible outcomes. Education on stroke risk reduction plays a key role in empowering patients to take control of their health and aids in reducing the recurrence of subsequent stroke.

According to Orem (2001), a lack of information, lack of understanding and limited judgment and decision-making creates self-care limitation and interferes with the deliberate

action for self-care. Understanding the complexities that stroke patients face is crucial in providing adequate education. The consequences of stroke can range from no disability to severe impairment of the ability to physically function and/or communicate. Problems secondary to stroke include impaired cognition, difficulty speaking and/or understanding, weakness or paralysis, visual loss and depression, among other symptoms (National Stroke Association, 2012).

Such impairments may complicate the ability to adequately educate stroke patients before discharge from a hospital stay. Maasland et al. (2011) noted that stroke and TIA patients are typically older than patients with other diagnoses. Disability or handicaps after stroke often result in increased needs for personal care and training. Physical handicaps such as paresis or language disorder as a consequence of stroke make it difficult to induce physical behavioral changes. Cognitive impairment after stroke may reduce the patient's ability to understand, retain and apply information received. Recognizing the different phases of coping that stroke and TIA patients go through during their hospitalization is essential in understanding how and when to implement different types of stroke education.

Some experts argue that shorter hospital stays might hamper adequate and timely stroke education provision for patients and families. Previous research suggests that shorter hospital stays limit the exchange of information (Rowe, Yaffa, Pepler, & Dulka, 2000). Conversely, Almborg, Ulander, Thulin and Berg (2008) found that shorter hospital stays may mean those patients were in better health after their stroke and therefore they perceived that their discharge planning was better due to the fact that they were healthier at discharge than some of the patients who had longer hospital stays and needed longer periods of care. Considering the latter assumption, it may be wise to be more attentive to those who have longer hospital stays and for

those who are dependent in their activities of daily living because they require more attention for goal-setting and planning for their continued support.

Education on stroke risk reduction, prevention of future strokes, healthy lifestyle practices, diet and exercise, and stress management are just a few of the education needs that should be taught before discharge (Ostwald, Davis, Hersch, Kelley, & Goodwin, 2008). The Joint Commission agrees with the above recommendations and Primary Stroke Centers must address five critical areas of patient education throughout the patient's hospitalization in order to meet Joint Commission accreditation requirements. The five areas include: individualized stroke risk factors, signs and symptoms of stroke, prompt activation of an emergency medical system when experiencing any signs or symptoms of stroke, discharge medication review and follow-up care post-hospitalization (The Joint Commission, 2013).

### **Stroke Patients' Perceptions of Stroke Education**

Communication between care healthcare providers and patients is a topic that has been identified in the literature as an area for improvement. Studies have consistently found that patients and their caregivers feel they receive too little information about all aspects of stroke and have inadequate support available to them (Garrett & Cowdell, 2005). The need to improve stroke education is indisputable according to Garrett and Cowdell, and patients and their caregivers are often dissatisfied with the information provided during their hospital stay.

Almborg et al. (2008) aimed to describe stroke patients' perceptions of their participation in discharge planning and identify the correlates to perceived participation. Results of the study showed that a large proportion of patients perceived that they did not participate in discharge planning regarding medical treatment and in developing plans for meeting patient goals and needs. When patients were provided with information about symptoms, medications and

limitations in activities, they perceived that they felt more prepared for discharge. Almborg et al. (2008) encourage health professionals to implement routine methods to include patients in goal-setting and assist in identifying patient needs in order to improve patient perception and participation in care.

Howell et al. (2007) found that patient experience scores were positively linked with adequate organizational stroke care, but a discrepancy existed between patients and healthcare providers' perceptions of communication regarding the diagnosis. The study aimed to uncover what elements of stroke care patients deemed as "value-added" which typically increases patient satisfaction. The concept of value-added care has been adopted by many healthcare organizations in order to implement a lean business environment that seeks to eliminate waste. Waste can exist in the form of time, money, supplies, or good will (Institute of Healthcare Improvement, 2005). The authors noted previous research showing that the most visible dimensions of stroke care are the components that provide the greatest patient satisfaction. For example, patients may not always be aware of the value of being weighed or they may not recognize the importance of receiving aspirin within 48 hours, but they will remember highly visible things such as care received from a multidisciplinary approach and having multiple encounters with a variety of disciplines. The study offers insight into what patients consider value-added and shows an example of how patient satisfaction scores ought to be obtained (via patient survey) in order to get realistic views of what patients deem important in the provision of stroke care. Concepts from the study relate to the problem-solving project in that healthcare providers must determine what patients view as value-added. Ensuring a strong multidisciplinary effort and competency of the multidisciplinary team is of paramount importance.



## **Nurses' Impact on Patient Education**

Healthcare providers, especially nurses, play a pivotal role in providing disease-specific education for patients and families in the acute care setting. In organizations providing healthcare services, nurses are the sole professional group that takes into consideration the biological, psychological and social dimensions of healthy or ill individuals together with their social environments and are in continuous interaction with them (Avsar & Kasikci, 2011.) Numerous randomized clinical trials have shown that nurse-delivered, brief and intensive interventions, are efficacious for a wide variety of patients (Rice & Stead, 2008). Nurses have an important role in patient education as they are well-positioned to deliver the necessary information patients and families need in order to make lifestyle modifications that will help reduce their risk of subsequent stroke.

Morris, Payne and Lambert (2007) conducted a study in order to understand the experiences of patients, caregivers and staff throughout stroke patients' hospitalizations. They noted a lack of research on the staff-patient relationship as it determines patients' responses to the care they receive. The study cites prior research suggesting that staff members' inadequate knowledge, training and skills are perceived barriers to effective inpatient stroke care. The authors found that patients and their caregivers shared common concerns with in-hospital stroke care. Current limitations of in-hospital stroke care included limited knowledge of medical professionals, lack of information regarding discharge and poor communication between staff and interdisciplinary teams. Patients and staff involved in the study cited failed inter-professional communication as a major frustration as well as a lack cohesive decision-making.

Patients complained that staff did not demonstrate insight into patient and caregiver needs for more information (Morris et al., 2007). Participants in the research contributed the following

recommendations for improved care: better staff training opportunities, better consideration of patients' individual needs, daily interdisciplinary rounding in the unit to improve communication, improved consistency of care and improved staffing ratios. Better staff training opportunities is a major area of focus relating to this problem solving project.

It is interesting to note the research conducted by West et al. (2012), a longitudinal study which explored factors associated with recall of education and satisfaction with healthcare provider communication in stroke and TIA patients. The authors made an excellent point in stating that stroke educators may assume that education delivered is equal to education retained or that education delivery automatically translates into improved patient outcomes. However, that is an assumption and it is important to remember that education given does not automatically translate to education retained. Suggestions from the study include enhancing stroke education by educating nurses on how to present stroke material and offering training for nurses on communication improvement. The authors noted that consistent and effective patient education before hospital discharge has the potential to reduce the risk of recurrent stroke. The study provides confirmation that nurses need enhanced stroke education in order to improve the patient education experience. Similarly, Wilson, Baker, Nordstrom, and Legwand (2008) stated that patients often receive information and instructions from health care providers, but it is difficult to know what they understand or if they are able to act on that information to promote their health.

### **Evidence-Based Practice and Strategies for Patient Education**

Evidence-based practice (EBP) is the integration of best research evidence with clinical expertise and patient values to facilitate clinical decision making (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). The use of EBP eliminates decision-making based on opinion, authority or custom, but rather places emphasis on decision-making based on identifying the best

available research evidence and integrating it with other factors (Polit & Beck, 2007). Evidence-based practice gives healthcare staff confidence that they are providing the highest quality of care to meet the needs of patients and their families (Roe & Whyte-Marshall, 2012).

Roe and Whyte-Marshall (2012) conducted a literature review on EBP and found the following common themes perceived by registered nurses (RNs) as barriers of implementation: lack of time and limited or inadequate knowledge, lack of nursing autonomy, lack of awareness of guidelines and lack of self-efficacy or motivation to perform the guideline recommendation. Facilitators of EBP are crucial in the clinical practice setting in order to encourage nurses to implement and utilize EBP guidelines. Just as staff nurses are responsible for delivering patient education, nurse educators are responsible for equipping staff nurses with the EBP resources necessary to facilitate high-quality, research-based care. Nurse educators are in a position to promote use of EBP guidelines among nursing staff and should utilize their knowledge and training to facilitate the provider/client learning partnership through the use of active teaching methods.

Joubert et al. (2009) noted the fact that despite widely available published guidelines, consensus statements and directives regarding secondary stroke prevention measures, implementation of evidence-based strategies is often suboptimal in both the hospital setting and after discharge. Many reasons are cited for the gap from theory to practice, but the authors focus on the absence of hospital protocols, busy general practitioners and a lack of clear guidelines for providers to follow regarding stroke risk-factor management. The study trialed the Integrated Care of the Reduction of Secondary Stroke (ICARUSS) model in order to implement recommended stroke prevention strategies. It incorporates a “shared care” component, which has been effective in the management of other long-term, chronic diseases, but had not been applied

to stroke. The main objective was to promote early initiation and long-term maintenance of best-practice recommendations for risk factor management in stroke survivors. Patients enrolled in the study were divided into two groups: one group followed a protocol where patient education focused on best practice recommendations and providers utilized a stroke care management flow chart (IC group). The patients in the IC group had frequent follow-up visits scheduled with their primary physician at 2 weeks, 3 months, 6 months, 9 months and 12 months. The other patients were assigned to receive the standard care (SC group), meaning that they received care according to what their providers had always done for inpatient and post-discharge stroke care. Their follow-up care and education was determined by their general practitioner (at whatever interval that the practitioner usually recommended) and the patients received only a phone call from the study coordinator after 12 months for evaluation. Results showed that participants in the IC group who received care using the stroke care management protocol based on best practice with frequent follow-up visits were much more successful in controlling their risk factors than participants who received standard care from their general practitioners.

Joubert et al. (2009) summarize that the use of models for ensuring effective, long-term risk factor management of stroke patients have been vague based on a review of complex interventions in stroke care which indicated that few have been either adequately designed or properly evaluated. They attribute the success of the IC model to telephone tracking and feedback, furnishing doctors with evidence-based guidelines and putting in place point-of-care reminders. The model aims to correct the following recognized inadequacies in standard care: poor patient knowledge about risk factors after a stroke event, lack of systematic risk assessment in hospital, doctors' unfamiliarity or disagreement with guidelines and neurologists who do not consider risk factor modification education their responsibility. Future research should evaluate

the sustainability and transferability of the IC model, its applicability in different settings (socio-economic, geographic, and cultural) and its long-term effect on prevention of stroke.

Much of the literature reviewed for this problem-solving project supports the findings of Maasland et al. (2011) in that there is an insufficient amount of research to determine any one superior method for the delivery of stroke education. However, there is a large quantity of evidence indicating that individualized, repetitive and active methods of education-giving are more successful in influencing health behavior and stroke risk reduction. The authors noted that patients who received education using active learning methods had significantly more knowledge of stroke than those who received education from passive learning methods. They point out that health education about stroke should start during the acute hospitalization phase and in order to be effective, should continue after discharge and should preferably be delivered by the same people throughout the continuum.

Specialized stroke nurses and nurse practitioners may play a key role in providing health education (Maasland et al., 2011). Stroke education provided in the healthcare setting should address patients' and caregivers' needs, issues and concerns. The information should be patient-centered, interactive, personalized, flexible and repetitive. It should create opportunities to apply new knowledge that leads to attitude changes. Although health education is time consuming for providers, it is an effective preventive method of reducing vascular events after TIA or stroke. The authors cite studies showing that nurses and nurse practitioners who used stages of change or self-management techniques as part of health education showed a positive effect. They conclude that health education should offer more than telling patients general facts about their disease. It should focus on improving knowledge and emphasize attitude and risk factor modification and must take into account the stage of each patient's motivation or willingness to

change their lifestyle. It must also demand active participation from patients. They conclude that future trials are necessary to determine what type of health education is needed specifically for stroke and TIA patients.

Smith, Forster and Young (2009) assessed the effectiveness of information provision strategies in improving outcomes for stroke patients and their caregivers. By conducting a systematic review of randomized controlled trials involving patients or their caregivers with stroke or TIA, the authors evaluated the intervention used (type of education, either passive or active) and timing of the intervention. Their results showed some evidence that interventions using active information provision are more effective than passive interventions when looking at clinical outcomes such as depression and anxiety. An identified problem of the literature review is a lack of one consistently used measure of information provision among all the studies, meaning that no one method for stroke education has been recommended over another. Although the best way to provide education remains unclear, the results of the literature review suggest that strategies which should be used routinely in practice are those that actively involve patients and caregivers and include planned follow-up for clarification and reinforcement.

### **Assumptions**

The author's assumptions about the project are as follows:

1. Nurses possess previous knowledge about teach-back, but are underutilizing it with regard to patient teaching.
2. Stroke patients have specific and complex needs that must be taken into consideration when planning patient education.

3. Nurses are expected to provide appropriate patient education as part of the care-giving continuum. The role of patient education falls directly on nursing staff who provide direct care for patients.

### **Orem's Self-Care Deficit Nursing Theory**

The problem solving project was guided by the conceptual framework of Orem's Self-Care Deficit Nursing Theory. Nursing practice based on the promotion of self-care is frequently guided by Orem's Theory of Self-Care Deficit. The Theory of Self-Care Deficit explains that maturing or mature adults deliberately learn and perform actions to direct their survival, quality of life, and well-being (Masters, 2014). Masters cited 5 methods nurses use to help meet the self-care needs of patients:

- Acting for or doing for another
- Guiding and directing
- Providing physical or psychological support
- Providing and maintaining an environment that supports personal development
- Teaching

Examples exist where Orem's Self-Care Deficit Nursing Theory is used in relation to teach-back. The concept of self-care underpins many nursing interventions, particularly those that are supportive as well as educational activities. These nursing interventions are intended to promote the ability of individuals or families to assume responsibility for an individual's healthcare needs (Cebeci & Sevilay, 2008). Use of Orem's Self-Care Deficit Theory was evident in the work of Wilson et al. (2008) where the authors assessed the relationship between health literacy and a mother's ability to comprehend and communicate information about childhood immunizations. They used teach-back to successfully assess and promote patient understanding.

To adapt to the new life situation that stroke deficits may present, stroke patients may have to make considerable adjustments. To facilitate healthy adjustments to stroke deficits, patients need proper knowledge to allow for competent, informed decisions. In order to attain competent and informed decisions, education is essential. Nurses are often accountable for creating educational care plans and function as the principal health educators. An important goal for the stroke patient is to improve self-care behavior in order to reduce the incidence of secondary stroke. Additionally, it is important for stroke patients to increase their recognition of stroke symptoms and to seek immediate care if they exhibit any signs or symptoms of stroke.

### **Teach-Back**

The primary focus for this project is utilization of the teach-back method for patient education. The conceptual underpinning of teach-back involves asking patients to restate information that has been presented to them (White, Garbez, Carroll, Brinker, & Howie-Esquivel, 2013). Teach-back is a way to validate that information given to the patient has been delivered in a way that the patient understands (AHRQ, 2010b). Patient understanding is validated when the patient correctly explains the content back to the teacher. Studies have shown that 40-80% of the medical information patients receive is forgotten immediately (Kessels, 2003). In order to increase retention, teach-back can be used to confirm that patients understand what has been taught. Also referred to as the “show me” method and “closing the loop”, teach-back is used as a strategy to eliminate the gap of communication between healthcare provider and patient.

Studies have been conducted to determine the efficacy of using teach-back for patient education, although no studies involving stroke education were found at the time of the literature review. White et al. (2013) studied teach-back with heart failure patients and found that it is an



effective method used to educate and assess learning. After exposure to education delivery using teach-back, the study sample was able to correctly answer heart-failure specific questions at a rate of 84% before hospital discharge and 77% of the time during follow-up. The study did not associate the use of teach-back with lower hospital readmission rates at 30 days, but the authors noted a trend toward significance in their data to support that teach-back does reduce hospital readmission rates. The authors state that further research is necessary to determine if utilization of the traditional education-giving methods versus using teach-back would improve readmission rates. Evidence for teach-back and reduced readmission rates exists and Koelling, Johnson, Cody and Aaronson (2005) demonstrated that a targeted intervention such as teach-back reduced hospital readmission rates by 51% at 180-day follow-up.

White et al. (2013) share an interesting finding of their study which reveals that most standard bedside teaching lasts only ten minutes and is usually done under rushed circumstances. At Essentia Health, anecdotal evidence is that nurses and nurse educators cite time constraints as a hindrance for effective patient teaching. Utilization of a teaching strategy that can be successfully completed within a short amount of time without compromising learning or retention is necessary to promote well-being and disease prevention.

Kripalani, Jackson, Schnipper, and Coleman (2007) used teach-back to assess patient's comprehension of education delivered. They concluded that teach-back is a strategy that enhances communication and confirms understanding. Using a series of teach-back interventions is a feasible and generalizable approach that can be adopted in most research settings to help assess comprehension of information presented. Teach-back enhances both short- and long-term recall of study related information and its use is advocated by the National Quality Forum (NQF) and by the Agency for Healthcare Research and Quality (AHRQ) (Kripalani et al., 2008).

### **CHAPTER 3. INTERVENTION AND IMPLEMENTATION**

This chapter discusses the intervention and implementation of the teach-back session developed by the research project investigator (author). The purpose of the problem-solving project titled “Reinforcing the Teach-Back Method for Nurses Providing Stroke Patient Education” was to provide educational sessions for nurses who have experience in caring for stroke patients and who have received prior education on utilization of the teach-back method. The intervention was a teaching session for nurses that provided a review of teach-back including (a) its key components, (b) the value of teach-back, and (c) the application of teach-back to increase confidence for use during patient education. Participants in the session were asked to complete a three part survey providing demographic information, perception of usefulness and responses to open-ended questions about teach-back. Answers from the nurses provided a view of what demographic factors are associated with nurses’ perceived usefulness of the teaching session.

#### **Intervention**

The teach-back session was offered to all nurses from the Medical-Surgical Unit, Cardiac Telemetry Unit, Critical Care Unit and Intermediate Critical Care Unit at Essentia Health, a Midwestern hospital with Primary Stroke Center certification. The project director contacted nurse educators and supervisors from each unit who were responsible for developing respective unit meeting agendas. The project director explained the purpose of the teach-back session and inquired as to whether the content was deemed appropriate for nursing staff.

All nurse educators and supervisors who were contacted agreed to allow the project director to conduct the teaching session at regularly scheduled nursing unit meetings in September and October of 2013. Nurses from each of the four units provide care for stroke

patients and are responsible for ensuring that patients and families receive the necessary education before the patient is discharged. The sessions were offered four times and approximately 80 nurses attended.

The teaching sessions were designed to last no longer than 30 minutes in duration with 20 minutes for content delivery and 10 minutes allowed for completion of the survey. Refer to Appendix A for an outline of the teaching session. After the content portion of the teaching session, participants were asked to leave their completed evaluation forms in a box near the door before leaving the unit meeting. The two larger units, Medical-Surgical and Critical Care, had the largest number of attendees with approximately 30 nurses attending each of those sessions. The Cardiac Telemetry Unit and Intermediate Critical Care Unit each had about 10 attendees at their respective sessions.

## **Implementation**

A PowerPoint presentation created by clinicians at the Iowa Health System entitled “Teach-Back: A Health Literacy Tool to Ensure Patient Understanding” was utilized as the main teaching modality (Iowa Healthcare Collaborative, 2013) for each session. The PowerPoint is endorsed by AHRQ and is part of the Health Literacy Universal Precautions Toolkit found online which includes a section entitled “The Teach-Back Method” (AHRQ, 2010). The objectives of the PowerPoint presentation are to (a) define teach-back and key components; (b) explain the value of teach-back in improving patient care; and (c) apply knowledge and skills to conduct teach-back throughout patient care. The PowerPoint presentation defines teach-back, identifies who should receive instruction using teach-back and when the teaching should occur. It offers examples of how teach-back should be delivered, cites research supporting the use of teach-back and offers tips on how to use teach-back successfully. Other teaching modalities utilized during

the session included role-playing, question and answer to actively engage participants and use of video clips.

Short video clips on successful demonstration of teach-back are included as part of the toolkit and were used in the teaching session to augment learning (Appendix B). A pocket card (Appendix C) highlighting key concepts was given to participants as a learning aid and reference tool. A facilitator's guide, which includes sample dialogue and suggested activities, is included in the toolkit and was utilized to effectively relay key concepts. Because the education session focused on enhancing knowledge that nurses already possess, the concept of repetition was employed. Orem's Theory of Self-Care was used as the conceptual model to demonstrate the importance of assessing health literacy levels before implementing the use of teach-back to promote learning and retention.

Participants were asked to complete a post-teaching session evaluation (Appendix D) designed to obtain demographic factors of the participants and their perceived usefulness of the content delivered. Organizing demographic factors such as age and years of experience helps to ascertain common themes among particular groups of nurses. The data will be used by nurse educators to determine if certain groups of nurses may benefit from further instruction on stroke education delivery using teach-back. Opportunity for future development of the problem-solving project exists because the concept of teach-back can be revisited for reinforcement of learning in future sessions.

The data were analyzed using simple descriptive statistics. The project director (author) of the problem-solving project collected the data under the direction of the principal investigator, an associate professor in the Department of Nursing at North Dakota State University. The

results were tabulated with assistance from the North Dakota State University Qualtrics Survey Software.

### **Protection of Human Subjects**

Institutional Review Board (IRB) approval was sought through North Dakota State University and was approved as an exempt status project. Essentia Health IRB was aware of the project, considered the activity a quality improvement project and acknowledged that North Dakota State University will serve as the IRB of record (Appendix E). Nurses participating in the educational sessions of this project were assured of anonymity and confidentiality and received a cover letter explaining the project and inviting them to participate (Appendix F).

## CHAPTER 4. EVALUATION

The purpose of this problem-solving project titled “Reinforcing the Teach-Back Method for Nurses Providing Stroke Patient Education” was designed to determine the perceived usefulness of a follow-up session on the teach-back method for nurses who currently care for hospitalized stroke patients. Participants in the session were asked to complete a three part survey providing 1) demographic information, 2) perception of perceived usefulness and 3) responses open-ended questions about teach-back. Responses from the nurses were organized to provide a view of what demographic factors were associated with nurses’ perceived usefulness of the teaching session.

First, demographic information was collected from participants to identify age, role, years worked as a nurse and unit worked most often. Second, a survey for the problem-solving project was created utilizing closed and open-ended questions. Five objectives for the session were stated and a 5-point Likert scale allowed participants to communicate the extent to which they felt that they had met each of the teaching session objectives. Respondents were able to select from one of the following options: 1-strongly disagree, 2-disagree, 3-undecided, 4-agree or 5-strongly agree. The focus of these questions was to determine the nurses’ perceived usefulness of the teaching session.

The third part of the survey contained, six open-ended questions that were posed to generate creativity and encourage respondents to share their ideas with regard to education for stroke patients. Respondents offered many insightful answers and demonstrated thoughtfulness regarding the patient education process.

## Results

A total of approximately 80 participants attended the teaching sessions and 43 completed the survey following the presentation (Nurse Teach-Back Session). See Table 1 for the demographic breakdown of nurse participants.

Table 1

*Demographics of Participants*

Factor	N	%
<b>Age of nurses</b>		
20-29	20	47
30-39	13	30
40-49	2	5
50-59	7	16
60 or older	1	2
<b>Years in nursing</b>		
0-5	23	53
6-10	9	21
11-20	2	5
21-30	2	5
31 years or more	7	16
<b>Title of nurses</b>		
RN	38	88
LPN	5	12
<b>Unit most frequently worked</b>		
Medical-Surgical	23	53
Intermediate Critical Care	6	14
Critical Care	9	21
Cardiac Telemetry	5	12

Figure 1 displays the data results for questions measured with the use of a Likert scale. The closed-ended questions measured in this section were designed to assist in determining to what extent nurses felt they had met each of the teaching session objectives. By in large, participants responded favorably to the content presented and reported that it positively affected

their use of teach-back in the future. The majority of nurses (25 of 43) reported they strongly agreed that after the teaching session they could define the teach-back method and its key components to effectively use teach-back during patient teaching. Twenty-eight respondents strongly agreed that they understood and could explain the value of teach-back to improve patient care after the teaching session and 28 also strongly agreed that they could apply knowledge and skills that increased their comfort levels when utilizing teach-back with stroke patients after the teaching session. A large majority of nurses either strongly agreed or agreed that their confidence levels in using teach-back had increased after participating in the teaching session. After the session's completion, most nurses strongly agreed that they would routinely use teach-back in their patient teaching. None of the participants disagreed with any of the session objectives and only a small percentage was undecided on any of the statements.

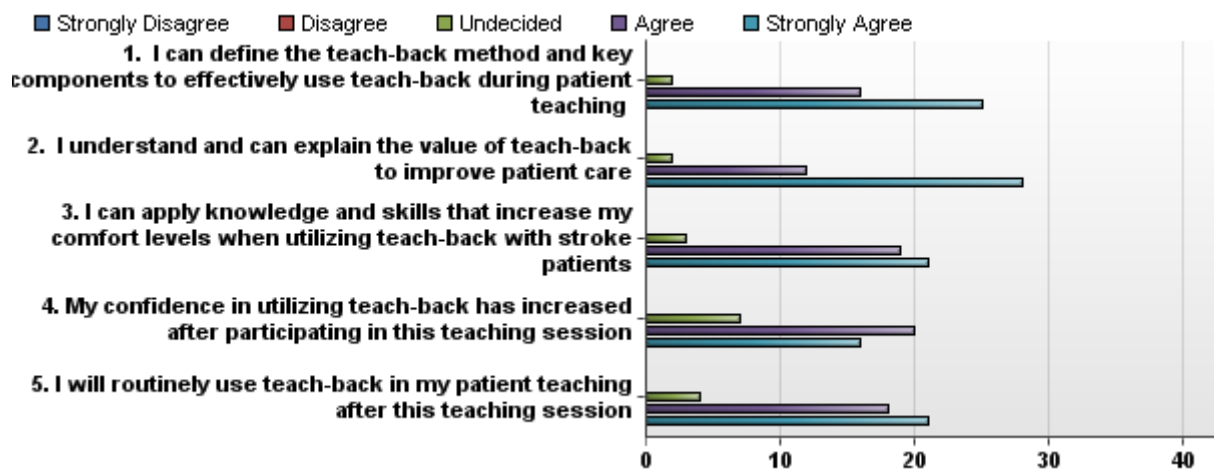


Figure 1. Perceived usefulness of teach-back session on (all nurses).

### Demographic Factors Influencing Practice

Demographic factors focused on were age, years of experience, title (RN or LPN) and unit most frequently worked. A total of five LPNs participated and all five worked most frequently in the Medical-Surgical Unit and had five or less years of experience. When



examining LPNs perceived usefulness of the teaching session and whether or not it would incite a practice change, two strongly agreed, two agreed, and one was undecided about whether they would routinely use teach-back in their patient teaching after participating in the teach-back session.

Further analysis of the data gives insight into what demographic factors contributed to the perceived usefulness of the teaching session. Because of the limited number of LPN participants, the RN responses were analyzed more closely to identify common themes. The purpose of this project was to determine what demographic factors affect perceived usefulness of the teach-back session. By separating the RNs into three different categories according to years of experience, some common themes were identified. Eighteen RNs had 0 to 5 years of experience, eight RNs had 6 to 10 years of experience and 11 RNs had 11 or more years of experience. According to responses based on the Likert scale statements, RNs with 6-10 years of experience indicated the highest perceived usefulness of the teach-back session. One of the most important pieces of information for the author was to determine whether or not the teaching session would impact the routine use of teach-back in stroke patient education. On the 1 to 5 Likert scale, RNs with 6 to 10 years of experience indicated the strongest likelihood of routinely using teach-back after the teaching session ( $\bar{x} = 4.63$ ), those with 11 or more years of experience indicated slightly less inclination to routinely use teach-back ( $\bar{x} = 4.55$ ) and nurses with 0 to 5 years of experience reported the lowest likelihood of routinely using teach-back ( $\bar{x} = 4.22$ ). Interestingly, nurses with 0 to 5 years of experience indicated the lowest values on the Likert scale for all five statements.

## **Delivering Stroke Patient Education**

The first open-ended survey question was as follows: “How has this training session changed the way you will deliver stroke patient education?” In response to this question, participants gave responses such as those listed below.

- “Do not use yes/no questions (with patients) unless no other way to communicate.”
- “I will be sure my patients can go home safely and be able to educate by applying information and verbalize understanding as they are able.”
- “I think teach back is important because we provide so much info to our patients and it’s good to know they are retaining the info.”
- “I will now use teach back to determine how well my patient understood my teaching.”
- “I’ll focus on open ended questions.”
- “Have patient/family explain what they know to ensure understanding.”
- “Will have patients teach back what they know about their plan of care and treatment.”
- “Be more specific and take the time to make sure they understand by asking the right questions.”

Overall, nurses responded that they will use certain components of teach-back to educate their patients and to ensure that their patient understands the education. Nurses with all levels of experience noted many of the same ideas when answering this question and none of the responses indicated that level of experience plays a strong role in how nurses will deliver education after the teaching session.

### **Nurses' Ideas to Promote Effective Patient Education**

The second survey question was as follows: “What ideas do you have to promote effective patient education?” The participants had a variety of responses for this question, but a common answer was to use teach-back when performing patient education. Other responses included the use of pictures and visual aids, engaging in conversation with the patient in order to teach versus using question and answer sessions and to have more time allocated for education. Again, nurses from all levels of experience offered suggestions for the promotion of patient education and no common themes were identified from any one group.

### **Experience Caring for a Stroke Readmission Patient**

The third survey question was as follows: “If you have had experience in caring for a stroke patient who was readmitted with another stroke, what did you do differently for their stroke education during their readmission stay?” Only 15 nurses responded to this question, which may indicate that the majority have not had the experience of caring for a readmitted stroke patient or it may indicate that they did not do anything differently during the patient’s stay. The only respondents to this question were nurses who had 0 to 10 years of experience. None of the nurses with 11 or more years of experience answered this question, so level of experience cannot be related to skill in addressing education needs for readmitted stroke patients. Some of the responses indicated the use of teach-back, but other strategies are listed below.

- “Going through education with them again.”
- “Identify what habits the patient changed and didn’t, and try to figure out any correlations.”
- “Talk more about risk factors and ways they can prevent future strokes.”

- “Going over changes that they didn’t make upon discharge that could have prevented them from having another stroke.”

### **Other Teaching Methods**

The fourth survey question was as follows: “On which teaching methods (either new or previously addressed) would you like more information?” Only eight responses were obtained for this question which may indicate that nurses feel satisfied with the amount of methods to which they have been exposed. One nurse responded simply in stating, “I just want to get better at teach-back.”

### **Resources Available to Assist Nurses with Patient Teaching**

The fifth survey question was as follows: “What other resources do you wish were available to assist with patient teaching?” Seven of the 20 responses for this question cited videos as a resource that nurses wished were available. One nurse would prefer pharmacy to be more involved with medication teaching. Another nurse indicated that more time with patients and family would be helpful for improving patient education. Three nurses noted that it would be beneficial to have a primary educator responsible for all patient education, not just stroke education. A nurse referred to the presumed difficulty in adding additional staff in today’s budget-conscious healthcare world, “A primary educator- I know impossible, but would be sooooo nice.”

### **Additional Resources for Patients and Families**

The sixth survey question was as follows: “What resources do you think patients and families would like to see utilized for patient education?” Of the 20 nurses who responded to this question, the most frequently occurring answer was videos and online resources (n=6). The second most repeated answer was a primary educator (or “specialized” nurse) (n=4) to work

primarily with patient education would be appreciated by patients and families. None of the responses indicated that the primary nurse should add to his or her teaching, which may reflect that participants feel that their current involvement in the patient education process is adequate.

### **Interpretation**

A goal of the problem-solving project was to determine what effect demographic factors played in nurses' use of teach-back. Overall, results of the survey indicate that nurses from all demographic categories overwhelmingly agree that the teach-back session increased their confidence levels in the use of teach-back. The vast majority of nurses also agreed that as a result of the teach-back session, they will routinely use the teach-back method for patient education. Nurses generally agreed that other objectives regarding teach-back had been met including knowledge about teach-back, the value of the method and their comfort level with utilization of teach-back.

The data indicates that out of the three groups of RNs, those with 0 to 5 years of experience may be an appropriate group to target with additional information on teach-back in future performance improvement activities. The data may suggest that more experienced RNs have a better understanding of the patient education process and are more receptive to utilization of the teach-back method.

Because of the small sample of LPNs, it is difficult to determine whether level of education plays a role in how patient education is delivered. Both RNs and LPNs reported favorable outcomes with regard to the teaching session objectives. Both nursing groups shared insightful comments in response to the open-ended questions.

The problem-solving project demonstrated that all nurses, including RNs and LPNs, from all age groups, with all measured levels of experience who work in any of the participating units

are receptive to using teach-back with their stroke patients. All demographic groups indicated that they would routinely utilize teach-back after the teaching session and all groups contributed meaningful insight into measures that can be implemented to improve the education experience for patients and families.

The results of the problem-solving project will be shared with the nurse educators and managers from each respective unit who participated in the teaching session. Because the teach-back session showed effectiveness in increasing nurses' understanding, knowledge and comfort in utilization of teach-back, the author will approach administrators from the hospital to offer the session to providers including physicians and advanced practice clinicians. A performance improvement plan that may occur as a result of this project is the use of teach-back with nurses and providers in the clinic outpatient setting.

### **Limitations**

Limitations of the problem solving project include the following: small sample size, small volume of LPNs involved and limited amount of time with the nursing staff to deliver the teaching session (30 minutes).

### **Recommendations**

As the results of the open-ended questions revealed, nurses have several suggestions to improve the quality of stroke patient education. Those recommendations will be passed along to nurse educators and managers and discussion must occur to determine the feasibility of implementing some of the recommendations that could improve the education experience. Nurses and nurse educators are responsible for determining the most effective methods of patient education, so consideration of supplementary teaching strategies is warranted to promote the best patient outcomes.

The project may be used as a platform for further study to determine whether use of teach-back plays a role in the reduction of patient readmissions and whether it increases patient satisfaction. Determining the impact that teach-back has on patient outcomes would warrant the participation of stroke patients and their families to collect input on their perceived usefulness of the use of teach-back in patient education. In order to determine if teach-back is effective in reducing stroke patient readmission rates, data would need to be collected to determine the baseline readmission rate for stroke patients. Data would need to be collected over a period of time to determine whether the teach-back method played a role in the reduction of readmissions.

## **Conclusion**

If we believe the projections proposed by the American Heart Association for an increased volume of stroke patients by the year 2030 (American Heart Association, 2013), we must focus on the primary prevention of stroke and concentrate on giving patients who have suffered a stroke the appropriate education to help them prevent a recurrent stroke. Patient education is a powerful tool that must be utilized to the fullest extent to promote health, reduce disease and disparity and reduce hospital readmission rates. The results of this project demonstrate nurses' perceived usefulness of the teach-back method for stroke patient education. Use of teach-back with stroke patient education may play a key role in the battle against the incidence of stroke and recurrent stroke. Nurses are responsible for providing stroke patient education in a way that the patient and family can understand and retain what has been taught. The teach-back method should be considered as a primary teaching strategy in order to promote health and reduce disease and disparity related to stroke.

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## **APPENDIX A. NURSE TEACH-BACK SESSION OUTLINE**

Nurse Teach-Back sessions will be offered during September and October of 2013. Participants invited to the education session include nurses who care for stroke patients from three separate units including two Medical-Surgical Units, Critical Care Unit and Intermediate Critical Care Unit. The teaching session will last approximately 30 minutes and will be offered a total of three different times to maximize participation. The session will be offered to approximately 80 nurses.

### **I. TEACH-BACK TRAINING**

#### **A. Teach-back PowerPoint (Iowa Healthcare Collaborative, 2013), Facilitator's Guide (Iowa Healthcare Collaborative, 2013)**

##### **1. Objectives**

- a) Define teach-back and key components
- b) Explain the value of teach-back in improving patient care
- c) Apply knowledge and skills to conduct teach-back throughout patient care

##### **2. What is teach-back? (2 minutes) (Schillinger, 2013.)**

##### **3. Review teach-back definition and concepts**

- a) Ask nurses to explain the definition of teach-back in their own words (actively engage learners using question and answer)

#### **B. Who should receive education using teach-back?**

1. All patients, families and caretakers (2 minutes) (AHRQ, 2013.)
2. Use regardless of education level, language or age

#### **C. Why should nurses use teach-back with stroke patients? (4 minutes)**

1. Actively engages patients
2. Many factors play impact patient's learning (e.g. pain, deficits from the stroke, medications, etc...)
3. Video clip (House MD episode, "Do I look like an idiot?")

<http://www.youtube.com/watch?v=dMAS2S51bM8>

D. Is teach-back is supported by research? (2 minutes)

1. Endorsed by organizations such as AHRQ, NQF, Joint Commission, ANA, AHA
2. Studies demonstrate teach-back's effectiveness (Iowa Healthcare Collaborative, 2013)

E. When should teach-back be used? (2 minutes)

1. In any setting and in all situations where nurses want clarification for what was taught or said
2. Stroke patient education begins during the hospital stay

F. How is teach-back used? (8 minutes)

1. In any setting and in all situations where nurses want clarification for what was said or taught (role-play teach-back with stroke patient scenario)
2. Video clip (patient education teach-back example from Minnesota Health Literacy Partnership) <http://www.youtube.com/watch?v=2N0gCzdVFmM>

## II. NURSE TEACH-BACK SESSION SURVEY

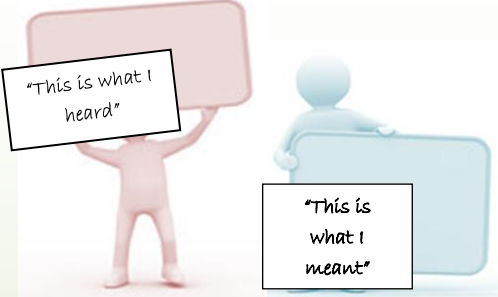
- A. Distribute cover letter and allow time for completion of survey (10 minutes)
- B. Collect survey

## **APPENDIX B. TEACH-BACK VIDEO CLIPS**

- 1) <http://www.youtube.com/watch?v=dMAS2S51bM8> – This video clip is an excerpt of the television show, “House”. The excerpt depicts an exchange between a patient and her physician. The patient tells her doctor that she is using her inhaler and goes through one inhaler a week. When the physician asks her to demonstrate how her inhaler works, she demonstrates that she has been using the inhaler incorrectly.
- 2) <http://www.youtube.com/watch?v=2N0gCzdVFnM> – Video clip demonstration of a patient education opportunity using teach-back. A health-care provider reviews after-visit instructions with her patient. She demonstrates correct use of the teach-back method and the patient validates correct knowledge by explaining his discharge instructions in his own words.



## APPENDIX C. TEACH-BACK POCKET CARD

<p style="text-align: center;"><b>TEACH BACK</b></p>  <p>Teach-back should be used with ALL patients to ensure that they understand information, changes, and instructions.</p> <p><i>Teach back is not just repeating back or saying "Yes, I understand".</i></p> <p><i>It is having patients <u>demonstrate</u> they understand what is required in <u>their own words</u>, related to their life. This is a way for us to confirm their understanding and identify areas of need.</i></p>	<p><b><u>Teach Back Questions to ask your patient:</u></b></p> <ul style="list-style-type: none"><li>• <b>How would you explain that to...</b>(your wife, your children)?</li><li>• <b>Tell me what you know about...</b>(your diabetes, asthma)?</li><li>• <b>How would you know...</b>(when to call the doctor, if you, had an infection)?</li><li>• <b>Show me how you would...</b>(take this insulin, use your inhaler) ?</li><li>• <b>What would you do if...</b>(you are on insulin but you get sick, have chest pain)?</li><li>• <b>Who would you call if...</b>(you have a temp over 102, your arm swells)?</li><li>• <b>What are 2 side effects of your medication?</b></li></ul> <p style="text-align: center;"><b>TEACH BACK TIPS:</b></p> <ul style="list-style-type: none"><li>• <u>Do not ask</u> "Do you understand?"</li><li>• Ask your patients to repeat <i>in their own words</i> what they need to do when they leave the hospital/the doctor's office.</li><li>• Let the patient know that you will be asking them questions after you review the information with them (they will pay more attention☺).</li><li>• Use phrase like: "I want to be sure that I did a good job explaining"</li></ul>
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Iowa Healthcare Collaborative: Teach Back Basics Toolkit (2012). Teach-Back Pocket Card. Retrieved from [http://www.ihconline.org/aspx/general/page.aspx?pid=107#Implementation\\_Tools](http://www.ihconline.org/aspx/general/page.aspx?pid=107#Implementation_Tools)

## APPENDIX D. NURSE TEACH-BACK SESSION SURVEY

### Nurse Teach-Back Session Survey

#### **Your Feedback is Important!**

This brief, two-part survey provides an opportunity for you to voice your opinion and share your ideas with regard to the patient education process for stroke patients. It will take approximately 10 minutes to complete. A full explanation of the teaching session and survey is provided on the cover letter you received with the NDSU letterhead.

Your responses will be kept confidential and will be used to gather information about how to improve stroke patient education at Essentia Health. Please complete each question with the answer that best represents you. Completion of the survey indicates that you consent to participate in this project. Place the survey in the box near the door as you leave.

#### **Section 1: About the Teaching Session**

Please circle the number that indicates the extent you feel you have met each of the listed objectives.

**1= Strongly disagree, 2= Disagree, 3= Undecided, 4= Agree, 5= Strongly agree**

<b>Objective</b>	<b>Rating (please circle number)</b>
1. I can define the teach-back method and key components to effectively use teach-back during patient teaching	1   2   3   4   5
2. I understand and can explain the value of teach-back to improve patient care	1   2   3   4   5
3. I can apply knowledge and skills that increase my comfort levels when utilizing teach-back with stroke patients	1   2   3   4   5
4. My confidence in utilizing teach-back has increased after participating in this teaching session	1   2   3   4   5
6. I will routinely use teach-back in my patient teaching after this teaching session	1   2   3   4   5

(Additional questions on back of sheet)

**Section 2: Short answer questions** (Please share your perspective for each of the following questions)

1. How has this training session changed the way you will deliver stroke patient education?
2. What ideas do you have to promote effective patient education?
3. If you have had experience in caring for a stroke patient who was readmitted with another stroke, what can you do differently for their stroke education during their readmission stay?
4. On which teaching methods (either new or previously addressed) would you like more information?
5. What other resources do you wish were available to assist with patient teaching?
6. What resources do you think patients and families would like to see utilized for patient education?

**Section 3: About :** Please check the box that answers the question

1. On which unit do you work most often? (Select one)
  - Medical-Surgical Unit
  - Intermediate Critical Care Unit
  - Critical Care Unit
2. What is your title?:
  - RN     LPN
3. How many years have you been a nurse?

<input type="checkbox"/> 0-5 years	<input type="checkbox"/> 21-30 years
<input type="checkbox"/> 6-10 years	<input type="checkbox"/> 31 years or more
<input type="checkbox"/> 11-20 years	
4. Please indicate your age range:

<input type="checkbox"/> 20-29	<input type="checkbox"/> 50-59
<input type="checkbox"/> 30-39	<input type="checkbox"/> 60 or older
<input type="checkbox"/> 40-49	

**\*Thank you for completing this survey!\***

APPENDIX E. IRB OF RECORD



Department of Nursing  
College of Pharmacy, Nursing and Allied Sciences  
Attn: Dr. Mary Wright  
NDSU Dept. 2670  
136 Sudro Hall, Po Box 6050  
Fargo, ND 58108-6050

September 4, 2013

Dear Dr. Wright,

I have been asked to review Ahren Dosch's Masters in Nursing Education project entitled "Reinforcing the Teach-Back Method for Nurses performing Stroke Patient Education". Per our Student Learner Policy this project is a quality improvement project. As such, a submission to Essentia Health's Internal Review Board is not necessary.

If you have any further questions, please feel free to contact me at 218.786.3008 or [kdean@eirh.org](mailto:kdean@eirh.org). We look forward to learning the results of Ms. Dosch's project and appreciate the opportunity to work with students from your program.

Sincerely,



**Kate Dean, MBA**  
**Director Health Science and Graduate Medical Education**  
**Essentia Institute of Rural Health**

Ph: 218-786-3008  
Email: [kdean@eirh.org](mailto:kdean@eirh.org)

## APPENDIX F. COVER LETTER FOR PARTICIPANTS

**NDSU**

**NORTH DAKOTA STATE UNIVERSITY**

701.231.7395

*Department of Nursing  
College of Pharmacy, Nursing, and Allied Sciences  
NDSU Dept. 2670  
136 Sudro Hall, P.O. Box 6050  
Fargo, ND 58108-6050*

### Nurse Teach-Back Session Survey

You are being invited to participate in an educational session and survey because you provide nursing care to stroke patients at Essentia Health. The education session is being conducted by Ahren Dosch, RN to provide information about the use of “Teach-Back” in caring for stroke patients. The project is a part of her Master of Science Degree at North Dakota State University under the supervision of Dr. Mary Wright, Associate Professor of Nursing. Following the educational session, you will be invited to complete a survey that hopes to explore the demographic factors that contribute to nurses’ use of teach-back. Your input is requested so that the Stroke Program at Essentia Health may continue to improve patient education opportunities. Direct benefits to the participant include the potential for increased knowledge of the content presented.

All nurses from CCU, ICC, and Med-Surg units are invited to the session. If you participate in the education session, please complete the survey that will be distributed at the end of the session. Your participation in this research is voluntary and you may choose not to participate or withdraw at any point without penalty. Your time in completing this survey is appreciated and it should take approximately 10 minutes to complete.

The identity of all participants will not be requested on the survey in order to maintain confidentiality. Only summary information about those who participate will be shared with Essentia Health or in any research publications. If you have questions please ask Ahren Dosch, she will be conducting the education sessions. Also, please keep a copy of this letter in case you have questions after completing the survey or so that you may contact one of the individuals listed below or NDSU.

If you have any questions regarding the survey please contact one of the following: Ahren Dosch, RN, her advisor, Dr. Mary Wright, or you may contact the Human Research Protection Program and North Dakota State University:

Ahren Dosch RN  
Essentia Health  
3000 32<sup>nd</sup> Ave S  
Fargo, ND 58103  
701-364-4398  
[ahren.dosch@ndsu.edu](mailto:ahren.dosch@ndsu.edu)

OR

Mary M. Wright PhD RN CNE  
Associate Professor  
Department of Nursing NDSU  
Fargo, ND 58108-6050  
701-231-9416  
[mary.wright@ndsu.edu](mailto:mary.wright@ndsu.edu)

OR

North Dakota State University IRB Office  
701-231-8908 or toll free 1-855-800-6717  
[ndsu.irb@ndsu.edu](mailto:ndsu.irb@ndsu.edu)