Title:
Using Teach-Back to Impact Readmission Rates

Joyce M. Soule, DNP, RN, NEA-BC, CNOR
Medical City Dallas, Dallas, TX, USA

Session Title:
Rising Stars of Research and Scholarship Invited Student Posters

Slot:
RS PST1: Sunday, 17 November 2019: 11:45 AM-12:15 PM

Applicable Category:
Clinical, Academic, Students, Leaders, Researchers

Keywords:
Patient Education, Readmission Rates and Teach-back

References:


Abstract Summary:
Chronic conditions effect 60% of the nation's population and account for 90% of healthcare dollars spent (Irving, 2017). Patient education is a key element in reducing readmissions. Nurses have an obligation to effectively educate patients in a way they understand. Research demonstrates that teach-back positively impacts patient literacy and adherence.

Content Outline:
1. Background: Chronic health conditions are a significant problem in healthcare. Chronic conditions affect 60% of the nations populations and account for 90% of healthcare dollars spent (Irving, 2017). Hospitals face reimbursement penalties for patients readmitted within 30-days following discharge. Patient education is a key element in how patients perceive their care and in reducing readmissions. The emergence of pay for performance measures has placed an increased focus on care transitions and emphasizes effectively treating patients to adhere to clinical guidelines at home. Nurses have an obligation to effectively educate patients in a way that can be understood. The lack of standardized approached to education creates variability and impacts overall quality of care. Research has demonstrated that teach-back is effective in improving patient literacy and adherence.

2. Research Questions:
   - Does the implementation of a teach-back toolkit intervention versus no intervention result in a difference in 30-day readmission rates between the control group and the intervention group?
   - Does the implementation of a teach-back toolkit training and intervention result in a difference in nurse conviction and confidence regarding teach-back pre-and-post test scores?

3. Body:
   - Setting and Sample: 796 bed urban hospital including staff nurses in inpatient units caring for patients with a primary neurological diagnosis
   - Design: Quasi Experimental with 1 hour didactic and learning lab education
   - Intervention: Teach-back education model utilized by nurses when educating patients in intervention unit. Control unit continued to use historical model.
   - Tools: Evidence based tool kit utilized from AHRQ Always Use Teach-back toolkit. Pictures of the tools are provided.
• Results: Statistical analysis of the results for each question is provided. The readmission rate demonstrated a reduction. However, not statistically significant (p = .1335). The secondary question regarding nurses conviction and confidence ratings did demonstrated a statistically significant improvement in nurse confidence following formalized training (p = .014).

4. Conclusions:
• No statistical difference noted in readmission rates. This mirrors literature findings of a demonstrated raw reduction with failure to be statistically significant.
• Nurse confidence rates saw a statistically significant improvement. This supports the hypothesis that structured educational training impacts confidence when utilizing teach-back.

5. Discussion and Implications
• Utilization of teach-back is an evidenced-based strategy to improve communication and information delivery to patients.
• Further evidence is needed to determine the change in nurse confidence finding can be consistently replicated.
• The project provides a baseline for further studies to evaluate the impact of teach-back on conviction and confidence.

Topic Selection:
Rising Stars of Research and Scholarship Invited Student Posters (25201)

Abstract Text:

Background and Problem Statement:
Chronic medical conditions are a significant problem in health care. Chronic conditions affect 60% percent of the nation’s population and account for 90% of healthcare dollars spent (Irving, 2017). Baby boomers accounted for one quarter of the population in 2012 and by 2029 it is expected that over 71.4 million people in the United States will be over the age 65, up 14% from 2012 (Pollard, & Scommegna, 2014). As baby boomers age and become a larger portion of the population, it is expected that the rate of chronic conditions will increase. The emergence of pay for performance measures has placed increased focus on care transitions and emphasizes effectively treating patients to adhere to clinical guidelines at home. Patient education enhancement is paramount as organizations work to reduce performance penalties by improving quality and patient care experience. As the volume of patients with chronic conditions increases, the current model of disease specific education coordinators or nurse navigators may not be sustainable. Education needs to be interdisciplinary and occur across the healthcare system to enable patients to effectively care for themselves at home (Marcus, 2014).

This investigator recognizes there is variation in education approaches across nursing units, team members and organizations. Education has shown to be the key to improving patient outcomes. Organizations and health care leaders have a responsibility to ensure the health care team members have adequate skills to educate patients and ensure that quality care is achieved and maintained. Nurses are responsible to ensure educational interventions are provided in an effective manner to
patients. One evidenced-based nursing educational intervention is teach-back. Teach-back is the process of providing education in a way that the learner understands and then asking the learner to relay back to the teacher what they understood. Teach-back has been an evidence-based education tactic used in relaying healthcare information and research demonstrates that it is effective in improving patient literacy and adherence (Ha Dinh, Bonner, Clark, Ramsbotham, & Hines, 2016).

**Purpose:** To evaluate the effects of a teach-back toolkit intervention on readmissions over 30 days among adult neurological patients. Secondarily, the project assessed the impact of a teach-back toolkit intervention on nurse perceptions of conviction and confidence.

**Methods:** This project used a quasi-experimental design comparing two acute care inpatient units. Both units treat patients with a primary neurological diagnosis. One unit included neurovascular patients and the other treated primarily epilepsy patients. These units were chosen because they had similar diagnosis, bed size, acuity levels, length of stay and staffing ratios. The units range from 12 to 17 beds with an average daily census (ADC) of 10-15 patients per unit.

Participants on the neurovascular unit were placed in the teach-back intervention group and participants on the epilepsy unit were placed in the standard care control group. A quasi-experimental design was chosen over a randomized control trial because it was not feasible to complete the monitoring of patients required in a randomized trial over the allocated implementation time. Nursing team members on the intervention unit, were trained on teach-back utilizing the Agency for Healthcare Research and Quality (AHRQ) sponsored Always Use Teach-Back Tool Kit (Abrams, M.A., Rita, S., Kurtz-Rossi, S., & Neilsen, G, 2012). This tool kit consists of a description of the 10 competency elements associated with teach-back, an interactive learning video, a conviction and confidence assessment tool, and an observation assessment tool.

The nurses on the intervention unit completed a Conviction and Confidence perception survey about teach-back pre-and-post intervention and attended an interactive educational session prior to implementation. Teach-back was implemented, and pre-post data was analyzed utilizing descriptive statistics, Chi Square, and Mann Whitney U tests.

**Results:** Thirty-day readmission rates reduced from 12.2% to 9.41% on the intervention unit and 12.2 to 10.66% on the control unit post implementation. There is no significant difference in readmission rates ($p = 0.1335$) between intervention and control units. Nurses conviction post-test scores regarding teach-back was not significantly different from the baseline ($p = .0625$). A significant difference between pre and post nurse confidence scores was demonstrated ($p = .014$).

**Conclusions:** Results did not show a significant difference in 30-day readmission rates. The project had limitations in the study design and may impact the study outcomes. Nurses had a high perception of importance prior to the implementation and it isn’t known how much teach-back was utilized in practice prior to implementation. A longer follow-up study with a stronger design is needed to calculate the effectiveness of teach-back implementation.