TEACH-BACK AND ITS IMPACT ON HOSPITAL CONSUMER ASSESSMENT OF HEALTHCARE PROVIDERS AND SYSTEMS (HCAHPS)

by

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Abstract

Successful patient outcomes rely heavily on patient engagement, patient/family education, and promotion of self-management. Teach-back methodology offers the healthcare team a proven technique to determine learner’s health literacy and true understanding of post-acute care needs. Based on supportive literature the following PICOT (problem, intervention, comparison, outcome, time) question was developed: For medical/surgical patients, can teach back methodology utilized during teaching improve patient satisfaction as measured by transitional care HCAHPS scores over a 12-week period? The Iowa Model of Evidence-based Practice (Iowa Model) was utilized to implement an evidence-based practice (EBP) intervention training nurses to use teach-back methodology for all education. The Conviction and Confidence Scale ([CCS], IHI, 2016) was administered pre-and post-implementation to determine current knowledge and use of teach-back. HCAHPS (hospital consumer assessment of healthcare providers and systems) transitional care scores were evaluated for patient perception of instruction. Data retrieved from the CCS showed a 65% increase in use of teach-back during patient instruction. HCAHPS scores indicated improvement in all three transitional care domains being measured. The project was limited by reliance on staff to implement teach-back techniques; promotion of the project attempted to overcome this limitation. It was determined HCAHPS scores are not a reliable indicator of teach-back use or a good
representation of consumer perception due to the small number of returned surveys. Future research should examine barriers to teach-back use for the healthcare team and results should be monitored via a data scale other than HCAHPS due to limited survey returns. Teach-back methodology is a simple, proven technique to improve self-management and increase patient engagement that impacts HCAHPS results.

Key words: teach-back, HCAHPS, engagement, patient education, patient self-management
Teach-Back and Its Impact on Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

There is established significance related to transitional care, the need to promote self-management and encourage patient engagement in a manner that overcomes health literacy differences in a blameless environment. Patient engagement has been deemed the miracle drug as engaged patients have fewer readmissions, utilize emergency services less, and consume less Centers for Medicare and Medicaid (CMS) expenditures (Hibbard & Greene, 2012). Teach-back methodology is a technique shown to be successful in building confidence, assuring comprehension and engaging patients in self-care (White, Garbez, Carroll, Brinke, & Howie-Esquivel, 2013).

Better patient coaching as well as education for healthcare providers related to self-care instruction and use of teach-back can help shift current practices and improve HCAHPS scores (Ladden et al., 2013). Additionally, patient/family preferences and quality of life need to be considered and teach-back offers a consistent method to determine health literacy and the success of patient teaching. A comprehensive transitional plan of care can improve patient satisfaction and adherence to the determined strategy (Fan et al., 2012). The teach-back method can assist the team in following the comprehensive transitional plan of care to improve patient and family comprehension of post-hospitalization
needs which will improve the patient experience which affects HCAHPS scores (Negarandeh, Mahmoodi, Noketehdan, Heshmat, & Shakibazadeh, 2013).

Implementation of teach-back as an always event, in alignment with Institute for Healthcare Improvement ([IHI], (2016) recommendations, can help improve patient comprehension of their health care needs which will be reflected in HCAHPS results. The method eases patient transition from acute care to home care and can be used with patients of all ages and to affirm teaching with family members or key learners (White, Howland, & Clark, 2015).

**Problem Description**

Each patient transition presents a risk of dereliction in communication or failure of patient understanding, thus resulting in suboptimal outcomes and worsening HCAHPS scores (Allen, Hutchinson, Brown & Livingston, 2014). Patients with chronic conditions require comprehensive discharge teaching to ensure proper understanding of post-acute needs and to promote self-management and compliance with after care. The Centers for Disease Control ([CDC], (2016) shared that 117 million people in the United States of America (USA) have at least one chronic disease they are managing. The CDC also noted that 86% of healthcare dollars spent in the USA is related to chronic disease. Any successful attempt to improve chronic disease management can have a significant impact on the future financial aspect of patient care.
The community impact of successful care transition can include a reduction in hospitalization, clinic visits and time off work, as well as improved patient outcomes and improved quality of life. Successful transitional care will address the triple aim goals of the IHI to promote the importance of the patient experience, overall global population health, and continued efforts to curb healthcare spending (Berwick, Nolan & Whittington, 2008, para.1).

**Available Knowledge**

An exhaustive review of the literature pertaining to teach-back methodology was completed. Databases searched included IHI (15), CINAHL (96), Cochrane (20), CDC, Joint Commission (JC) (1), PubMed (105), AHRQ guideline clearinghouse (47), Joanna Briggs Institute Library (3), ProQuest Nursing and Allied Health Source (0), and Google Scholar (4150). Search terms included *teach-back*, *teach back*, and *teach-back method*. The search term *transitional care* was also attempted with overwhelming results unrelated to teach-back.

Article inclusion was based on the depth of teach-back discussion and the appraisal of the evidence provided in the article. The Johns Hopkins nursing evidence-based practice model ([JHNEBP], n.d.) evidence appraisal process was used to determine the level of evidence once the article was deemed worthy of further evaluation. Articles that had limited information on teach-back were
excluded. Twenty articles were retained due to the wealth of information related to teach-back and/or JHNEBP strength of evidence.

Project implementation coincided with policy development by CMS and enactment of transitional care terminology codes to allow providers to charge for transitional care services. Per Bloink and Adler (2013), providers may be reimbursed $162.00-$229.00 for transitional care management. CMS services have ethical, equity and social justice undertones as the neediest population utilize CMS for healthcare payment. Development of charge codes by CMS acknowledges the importance of transitional care as part of the holistic team approach.

Gaps in discharge education are being addressed by nurses and healthcare team members via transitional care plans. The return of a patient to their community is important to the care team and assuring patient/family understanding and information sharing with the local providers is crucial. Transitional care teams try to meet the needs of the patient/family and providers but there are still gaps in the communication process which can be reflected in HCAHPS scores.

The Affordable Care Act (ACA) also addresses the need for proper communication between healthcare team members. The meaningful use aspect of the ACA is to improve the flow and timeliness of communication. If all providers have access to the same information, the plan of care should be more cohesive
TEACH-BACK AND ITS IMPACT ON HOSPITAL

The true benefits of the ACA related to meaningful use, are still becoming apparent, but the act has affected transitional care. Patient and family preference is important when wanting to garner compliance. Patient quality of life should be a primary outcome when determining a plan of care (Naylor et al., 2013). Teach-back has been shown to affect the patient’s perception of their quality of life and determination of functional outcomes the patient hopes to reach can help the nurse guide discharge teaching (Black et al., 2014).

**Rationale**

Agency for Healthcare Research and Quality ([AHRQ], (n.d.) describes evidence based practice (EBP) in the healthcare setting as the marriage of clinical expertise, best, available research evidence and consideration of patient’s preferences and values. The first step in the evidence-based process is to identify an evidence-based practice model to help examine a clinical opportunity for improvement and assist in the research for and synthesis of appropriate evidence. For this project, the Iowa Model of Evidence-Based Practice (Iowa model) was utilized. The Iowa model has clearly defined components and an easy to follow algorithm preventing interpretive confusion (Eberhardt, 2014). Bullet points help clarify each step aiding in the use of the algorithm and the model reads like a set of directives.
The Iowa model can be applied to individuals or used in a systems environment and is a great indicator of opportunities for improvement in the clinical setting (Iowa Model Collaborative, 2015). The model addresses a team approach and has implementation strategies that give suggestions to ease identification of a clinical problem, pilot implementation, and evaluation of changes requiring the team to evaluate the final process. Having a post-implementation evaluation process can help assure sustainability of a needed innovation.

The Iowa model framework aligns with the aims of the project as use of the teach-back method requires systems thinking as the healthcare team is apprised of multiple disciplines. The PICOT question is supported by the framework and appropriate outcomes have been determined. For the DNP project only the nursing staff were educated in the use of teach-back, however there are opportunities to expand to other disciplines in the future.

Specific Aims
The purpose of the project was to improve patient engagement and improve transitional care HCAHPS scores through utilization of the evidence-based intervention of teach-back. Transition of care is a vulnerable time for patients and inadequate education can increase that vulnerability (Nelson, 2015). Teach-back is a process that has proven to increase patient understanding of post-acute healthcare needs and can in turn improve the patient experience.
Staff education in proper use of the methodology assured standardization of utilization. Completion of this manuscript allows for reproduction of the best-practice project and continued efforts to improve patient understanding of healthcare management. Encouragement from the project organization will assist with stakeholder buy-in and implementation of the EBP project.

**Organizational Background**

The project organization has over 750 beds and is a tertiary, academic hospital in the United States. The hospital has Magnet designation and nursing leadership identified a need for improving transitional care HCAHPS scores. The organizational Institutional Review Board (IRB) deemed that the project did not meet the regulatory definition of human subjects’ research and did not require IRB oversight as the project was a quality improvement project aimed at implementing an approved practice.

The target population included all medical/surgical patients who were being discharged during a 12-week monitoring period. The population of the project unit was primarily composed of patients with chronic conditions with comorbidities. Individuals admitted to the medical/surgical units are at high risk for readmission due to the complexity of managing chronic medical conditions (Prystowsky, 2015). The transitional care staff on the project unit was targeted for teach-back education, with nursing staff being the primary team members.
Methods

The evidence-based intervention of teach-back was implemented for all patient education opportunities on the project unit. Staff was instructed on the proper use of the method and provided an opportunity to practice teach-back with peers in a nonthreatening environment. During education, the team was provided with scenarios in which teach-back was an appropriate method for instruction. Scripted pocket cards were provided for utilization during educational opportunities and encouraged for use in patient interactions.

Context

The project required collaboration with the transitional care team which spans across multiple departments including nursing, social work, therapy, pharmacy, and medicine. There were multiple EBP projects being implementing throughout the hospital. The project unit was identified by leadership as there were no projects in place that could skew the data being collected.

The socioeconomics and culture of the community at the project hospital are such that results from the EBP project could be duplicated. Being an academic hospital, there are a multitude of cultures in the area. Additionally, the intervention is a process that is adoptable to all cultures and socioeconomic classes.
Interventions

The CCS was administered prior to education to determine current use/understanding of teach-back. Staff on a medical/surgical unit was trained in teach-back via PowerPoint presentation, hands-on practice, and scripting to use teach back for all patient education. The team was instructed to determine the key learner(s) for each patient and assure their presence during education and do so in a blameless manner. Teach back is most successful when instructions are repeated throughout the hospitalization in short sessions (White et al., 2013). Therefore, staff was instructed to recognize opportunities for education from admission to discharge.

The project design included group education for the nursing staff and other team members. The setting for implementation was primarily an inpatient medical/surgical unit. However, some occupants were outpatients due to overflow from other units because of high census in the facility. The sample for the project included all medical/surgical patients being discharged from the pilot unit during the project timeframe of three months. There was no identifying data collected and no patients were excluded.

The CCS allows for a true understanding of how well the nursing staff complied with use of teach-back during the pilot period. There is no reliability or validity available for the scale. However, the sole purpose in using this
measurement tool is to determine nursing staff understanding and use of teach-back prior to implementation as well as during the active project data monitoring.

The project organization has many years of transitional care data that was measured with the current methods of education. The data groups were relatively stagnant lending validity to any changes observed during the EBP project. Given the strong literature support of the intervention, expectation of teach-back being an always event, and intense education for the project unit, it is believed the results reflect the work that was done during the project.

Measures

The data collected for the project included HCAHPS scores specific to transitional care, individualized to the project unit. Transitional care scores are more sensitive than general discharge/patient satisfaction scores, thus they were used to adequately identify the project intervention had significant impact in patient perception of discharge instruction and transition of care. The HCAHPS survey is a valid, reliable instrument. CMS completed a study analysis identifying the majority of the questions on the HCAHPS have a Cronbach’s alpha coefficient of internal consistency reliability of >0.80 (CMS, 2003).

Post-implementation data was collected through contracted Press-Ganey reports, which include HCAHPS scores. Statistical analysis of pre-implementation data was compared to post-implementation data. Data for three months prior to team education served as the pre-implementation data. Data from the month when
education was provided was excluded from both data sets as the month when education was provided could represent intermittent use of teach-back during education. Anticipated results were an increase in patient satisfaction as measured through the transitional care specific HCAHPS question. The surveys are sent to random patients upon discharge and aggregate data will allow for summary statistics. Each month offers an $n$-value to allow for a true interpretation of results in relation to the number of returned surveys. The project allowed for three months of comparative data.

Continued use of teach-back will be sustained by the department of continuum of care and individual unit leadership teams. Additional implementation in other care areas will expand teach-back use. The limited cost of educating the healthcare team in teach-back and its implementation make the intervention efficient and easy to implement.

Analysis

The Iowa model provided a strong framework for identification of organizational needs and step-by-step implementation guidelines. The data source allowed for inferences from quantitative data. The data provided a complete history of the previous quarter’s transitional care HCHAPS scores allowing for comparison to scores during the project period of the same time length. While time is a variable, it did not play a statistically significant role in the data analysis
as both sets of data were exposed to the same time opportunities between
reception of service and return of the survey.

While literature supports teach-back to be a successful intervention and
HCHAPS to be a valid data measure, the data groups were not as large as would
be hoped for. The data allowed for measurable change but the project data was at
the mercy of the patients to return the HCAHPS surveys. The data constraints
indicate the need to utilize a different data source to gain a true understanding of
the effects of teach-back on transitional care.

Ethical Considerations

It is vital to ensure ethical practice in healthcare to prevent patient harm
and promote safe practice. The project was subjected to both organizational and
educational institution IRBs. Both entities identified the best-practice intervention
as a quality improvement project with no threat to human subjects. Therefore,
there were no ethical aspects to the project. The intervention was a proven,
approved practice based on statistically significant research and publications.

The project originator is employed by the project organization and
identifies no conflicts of interest. The project unit was determined by the
department of nursing and the project was mentored by an organizational
employee. Great care was taken to assure all ethical issues were considered in the
design, implementation, dissemination, and data collection related to the
intervention.
Results

Post-project, the team completed the CCS (IHI, 2016) a second time with scores indicating 65% of the transitional care team reported using teach-back for all patient education opportunities, while 100% participation would be preferred, 65% is a significant increase in regular use of the method. Initial survey reports determined 76% of the team had used teach-back, but not as a regular method of education. Thereby, 65% report making teach-back an always event.

HCAHPS project values (Figure 1) were determined by combining the previous three month responses in each category divided by the n-value. For the pre-implementation data, there were 26 surveys returned. Understanding the purpose for medications received the highest, *strongly agree* responses at 53%. Patient preference measurements averaged 27% and understanding management of health responses had strongly agree 33% of the time.

Regarding the question, “during this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left,” (CMS, 2014) *strongly agree* responses increased by 19%, with an average of 46%. When determining the patient’s ability to manage their health, there was a 19% increase with an average of 50% of respondents strongly agreeing with the HCHAPS statement “when I left the hospital, I had a good understanding of the things I was responsible for in managing my health.” (CMS, 2014)
Finally, the question, “when I left the hospital, I clearly understood the purpose for taking each of my medications,” (CMS, 2014) responses that strongly agree increased by 10%. Therefore, the overall improvements in HCAHPS strongly agree responses were 45%. The resulting data indicate a strong relationship between teach-back methods and increased awareness of patient preferences and patient understanding of medication information.

As previously discussed, a better data measurement tool may be more accurate when measuring patient perception of educations. The HCAHPS are sent to a small percentage of patients with an ever-smaller percentage completing and returning the surveys for evaluation. No modifications were made to the intervention once implemented. There were no unintended consequences with the intervention and all data is accounted for.

**Discussion**

Teach-back has been identified as a practice that engages patients allowing for confirmation of understand and an open feedback loop for continued educations (Koh, Brach, Harris, & Parchman, 2013). The EBP project implemented a successful intervention to improve patient engagement and improve HCAHPS scores.

The project strengthened the hypotheses that the Iowa model is an effective framework for implementation of EBP identification and change. The model’s algorithm proved to be easy to follow, and appropriate for both the small
unit and larger organization overall. Organizational support of the project resulted in seamless implementation followed by data monitoring and compilation. The project organization was consistent with practices identified by Bobay et al., (2015), who noted that Magnet® facilities have shown to incorporate teach-back and maintain consideration of a learner’s health literacy.

The credentialing body JC has identified improved transitions can result in better patient outcomes and increased patient satisfaction (Shamji, Baier, Gravenstein, & Gardner, 2014). CMS has also promoted moving towards improved patient engagement and self-management as evidence in the IMPACT Act. The EBP intervention has assisted the project organization with both JC and CMS standards and provided an ethically responsible, low cost manner to properly educate patients (DiChiara, 2015).

**Summary**

The key findings from the EBP project implementation is the need for continued education of staff regarding the proven benefits of teach-back. The improved HCAHPS scores indicate patients benefit from use of the method, especially due to the method’s ability to provide a true understanding of a patient’s health literacy and social demographic allowing staff to focus efforts where they will most benefit a patient (Zoellner et al., 2016). The results indicate the strength patients can draw from proper education and understanding of post-acute care needs.
Interpretation

The intervention for the project identified a strong association between patient understanding and teach-back method of education resulting in improved HCAHPS scores. These findings mimic what the literature indicates. Similar projects found improved patient perception of quality of life and determination of functional outcomes (Black et al., 2014). The project impacted the unit significantly with a 25% improvement in HCAHPS scores specific to transitional care. System wide, teach-back is a cost-effective method to reduce consumption of health-care resources.

The anticipated and observed outcomes aligned with what was expected. Literature shows improve understanding and increased satisfaction when teach-back is used which was indicated in the improved HCAHPS scores. The results were similar to previous, published teach-back interventions (Caplin & Saunders, 2015).

Limitations

The project was limited in its reliance on the transitional care team to implement the intervention. Regarding internal validity, the CCS (IHI, 2016) allowed subjective responses to be provided by the team. There is concern that staff may have inflated their use of teach-back to appear compliant with the intervention. To adjust for this limitation, staff was requested to leave the surveys anonymous and be honest in their answers.
Conclusions

The project has proven useful in encouraging staff to use the evidence-based method of teach-back for all patient education opportunities. Patient impact was evident in the improved transitional care HCAHPS scores. The project is sustainable throughout the organization with minimal implementation costs. Teach-back is a concept that can be spread to other context both within and outside the project organization. Further study should utilize a data set that captures a better snapshot of overall patient response to teach-back methodology. The EBP project indicates teach-back is a method that should be used in nursing practice and sustained at a level that promotes its use.


Eberhardt, S. (2014). Improve handoff communication with SBAR. *Nursing, 44*(11), 17-20. doi: 10.1097/01.NURSE.0000454965.49138.79


Hibbard, J., & Greene, J. (2012). Why does patient activation matter? An examination of the relationships between patient activation and health-


Ladden, M., Bodenheimer, T., Fishman, N., Flinter, M., Hsu, C., Parchman, & M., Wagner, E. (2013). The emerging primary care workforce:
Preliminary observations from the primary care team: Learning from effective ambulatory practices project. *Academic Medicine, 88*(12), 1830-1834. doi: 10.1097/ACM.0000000000000027


