

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

by

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1 Abstract

2 Successful patient outcomes rely heavily on patient engagement,
3 patient/family education, and promotion of self-management. Teach-back
4 methodology offers the healthcare team a proven technique to determine learner's
5 health literacy and true understanding of post-acute care needs. Based on
6 supportive literature the following PICOT (problem, intervention, comparison,
7 outcome, time) question was developed: For medical/surgical patients, can teach
8 back methodology utilized during teaching improve patient satisfaction as
9 measured by transitional care HCAHPS scores over a 12-week period? The Iowa
10 Model of Evidence-based Practice (Iowa Model) was utilized to implement an
11 evidence-based practice (EBP) intervention training nurses to use teach-back
12 methodology for all education. The Conviction and Confidence Scale ([CCS],
13 IHI, 2016) was administered pre-and post-implementation to determine current
14 knowledge and use of teach-back. HCAHPS (hospital consumer assessment of
15 healthcare providers and systems) transitional care scores were evaluated for
16 patient perception of instruction. Data retrieved from the CCS showed a 65%
17 increase in use of teach-back during patient instruction. HCAHPS scores
18 indicated improvement in all three transitional care domains being measured. The
19 project was limited by reliance on staff to implement teach-back techniques;
20 promotion of the project attempted to overcome this limitation. It was determined
21 HCAHPS scores are not a reliable indicator of teach-back use or a good

22 representation of consumer perception due to the small number of returned
23 surveys. Future research should examine barriers to teach-back use for the
24 healthcare team and results should be monitored via a data scale other than 25
HCAHPS due to limited survey returns. Teach-back methodology is a simple,
26 proven technique to improve self-management and increase patient engagement
27 that impacts HCAHPS results.

28 Key words: *teach-back, HCAHPS, engagement, patient education, patient*
29 *self-management*

30 Teach-Back and Its Impact on Hospital Consumer Assessment of Healthcare
31 Providers and Systems (HCAHPS)

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

41 Better patient coaching as well as education for healthcare providers
42 related to self-care instruction and use of teach-back can help shift current
43 practices and improve HCAHPS scores (Ladden et al., 2013). Additionally,
44 patient/family preferences and quality of life need to be considered and teach-
45 back offers a consistent method to determine health literacy and the success of
46 patient teaching. A comprehensive transitional plan of care can improve patient
47 satisfaction and adherence to the determined strategy (Fan et al., 2012). The
48 teach-back method can assist the team in following the comprehensive transitional
49 plan of care to improve patient and family comprehension of post-hospitalization

50 needs which will improve the patient experience which affects HCAHPS scores
51 (Negarandeh, Mahmoodi, Noketehdan, Heshmat, & Shakibazadeh, 2013).

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

58 **Problem Description**

59 Each patient transition presents a risk of dereliction in communication or
60 failure of patient understanding, thus resulting in suboptimal outcomes and
61 worsening HCAHPS scores (Allen, Hutchinson, Brown & Livingston, 2014).
62 Patients with chronic conditions require comprehensive discharge teaching to
63 ensure proper understanding of post-acute needs and to promote self-management
64 and compliance with after care. The Centers for Disease Control ([CDC], (2016)
65 shared that 117 million people in the United States of America (USA) have at
66 least one chronic disease they are managing. The CDC also noted that 86% of
67 healthcare dollars spent in the USA is related to chronic disease. Any successful
68 attempt to improve chronic disease management can have a significant impact on
69 the future financial aspect of patient care.

90 excluded. Twenty articles were retained due to the wealth of information related
91 to teach-back and/or JHNEBP strength of evidence.

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

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

107 The Affordable Care Act (ACA) also addresses the need for proper
108 communication between healthcare team members. The meaningful use aspect of
109 the ACA is to improve the flow and timeliness of communication. If all providers
110 have access to the same information, the plan of care should be more cohesive

111 (Hinrichs & Zarcone, 2013). The true benefits of the ACA related to meaningful
112 use, are still becoming apparent, but the act has affected transitional care.

113 Patient and family preference is important when wanting to garner
114 compliance. Patient quality of life should be a primary outcome when determining
115 a plan of care (Naylor et al., 2013). Teach-back has been shown to affect the
116 patient's perception of their quality of life and determination of functional
117 outcomes the patient hopes to reach can help the nurse guide discharge teaching
118 (Black et al., 2014).

119 **Rationale**

120 Agency for Healthcare Research and Quality ([AHRQ], (n.d.) describes
121 evidence based practice (EBP) in the healthcare setting as the marriage of clinical
122 expertise, best, available research evidence and consideration of patient's
123 preferences and values. The first step in the evidence-based process is to identify
124 an evidence-based practice model to help examine a clinical opportunity for
125 improvement and assist in the research for and synthesis of appropriate evidence.

126 For this project, the Iowa Model of Evidence-Based Practice (Iowa model)
127 was utilized. The Iowa model has clearly defined components and an easy to
128 follow algorithm preventing interpretive confusion (Eberhardt, 2014). Bullet
129 points help clarify each step aiding in the use of the algorithm and the model
130 reads like a set of directives.

152 Staff education in proper use of the methodology assured standardization
153 of utilization. Completion of this manuscript allows for reproduction of the best-
154 practice project and continued efforts to improve patient understanding of
155 healthcare management. Encouragement from the project organization will assist
156 with stakeholder buy-in and implementation of the EBP project.

157 **Organizational Background**

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

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

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Methods

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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.

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 socioeconomic 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.

194 **Interventions**

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

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

211 The CCS allows for a true understanding of how well the nursing staff
212 complied with use of teach-back during the pilot period. There is no reliability or
213 validity available for the scale. However, the sole purpose in using this

235 education was provided was excluded from both data sets as the month when
236 education was provided could represent intermittent use of teach-back during
237 education. Anticipated results were an increase in patient satisfaction as measured
238 through the transitional care specific HCAHPS question. The surveys are sent to
239 random patients upon discharge and aggregate data will allow for summary
240 statistics. Each month offers an *n-value* to allow for a true interpretation of results
241 in relation to the number of returned surveys. The project allowed for three
242 months of comparative data.

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

248 **Analysis**

249 The Iowa model provided a strong framework for identification of
250 organizational needs and step-by-step implementation guidelines. The data source
251 allowed for inferences from quantitative data. The data provided a complete
252 history of the previous quarter's transitional care HCHAPS scores allowing for
253 comparison to scores during the project period of the same time length. While
254 time is a variable, it did not play a statistically significant role in the data analysis

255 as both sets of data were exposed to the same time opportunities between
256 reception of service and return of the survey.

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

263 **Ethical Considerations**

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

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

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Results

277 Post-project, the team completed the CCS (IHI, 2016) a second time with
278 scores indicating 65% of the transitional care team reported using teach-back for
279 all patient education opportunities, while 100% participation would be preferred,
280 65% is a significant increase in regular use of the method. Initial survey reports
281 determined 76% of the team had used teach-back, but not as a regular method of
282 education. Thereby, 65% report making teach-back an always event.

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

289 Regarding the question, “during this hospital stay, staff took my
290 preferences and those of my family or caregiver into account in deciding what my
291 health care needs would be when I left,” (CMS, 2014) *strongly agree* responses
292 increased by 19%, with an average of 46%. When determining the patient’s
293 ability to manage their health, there was a 19% increase with an average of 50%
294 of respondents strongly agreeing with the HCHAPS statement “when I left the
295 hospital, I had a good understanding of the things I was responsible for in
296 managing my health.” (CMS, 2014)

339 **Interpretation**

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

348 The anticipated and observed outcomes aligned with what was expected.
349 Literature shows improve understanding and increased satisfaction when teach-
350 back is used which was indicated in the improved HCAHPS scores. The results
351 were similar to previous, published teach-back interventions (Caplin & Saunders,
352 2015).

353 **Limitations**

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

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Conclusions

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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.

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