The effect of a hybrid training program: Improving nursing communication skills and HCAHPS scores

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Hospital administrators nationwide are strategizing how to improve the patient experience and Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores. In October 2012, the Centers for Medicare and Medicaid Services (CMS) began rewarding hospitals that provide high-quality care through its Value-Based Purchasing (VBP) program as part of the Affordable Care Act. The funding for these programs comes from cash withheld from usual Diagnosis-Related Group (DRG) payments to hospitals that receive CMS funds. In fiscal year (FY) 2014, 1.25% of all DRG payments were withheld for VBP distribution for a total amount of nearly $1 billion. The withheld percentage increased to 2% in FY 2017. Hospitals that receive CMS payments are now competing against each other nationally for this money.

HCAHPS scores determine 25% of total current VBP payments. Hospital administrators are rethinking their strategies to improve HCAHPS scores to maximize CMS payments from the VBP program. Many are doing so by investing in superficial amenities, such as fine-dining options, valet parking, and information technologies. But can these material assets be a substitute for a change in culture and solve patient communication challenges in the delivery of care? A study investigating the relationship between different elements of HCAHPS scores and readmissions shows that although investing in such material assets is one strategy, it’s the communication between caregivers and patients that has the largest impact on reducing readmissions.

Some hospitals have initially focused on leadership training to improve HCAHPS scores, whereas others have focused on physician communication efforts. Although these are worthwhile strategies, the CMS notes that nursing HCAHPS scores have the strongest correlation with a hospital’s overall HCAHPS scores after analyzing 3.1 million HCAHPS surveys in its 2014 report HCAHPS Patient Level Correlations. Hospitals looking to improve HCAHPS scores may benefit from a strategy to improve nursing communication.

One of the ways to increase nurse communication scores is through designing customized training programs for nurses. In addition to improving the patient perception of care, studies have shown that nursing communication training is effective in improving patient engagement and reducing readmissions. Hospitals that choose to target nursing communication training in their HCAHPS improvement efforts need to pay careful attention to the design and delivery of the training for it to be effective for nurses with different learning preferences.

We asked: What’s the best method to deliver nursing communication training so that nurses with different learning preferences can improve nursing HCAHPS scores? To investigate this, we designed a hybrid training program known as the PatientSET program (satisfaction every time). The aim of this program was to increase nurses’ knowledge of best-practice patient communication skills and motivate them to improve their bedside interactions with patients. The program was designed to enable both cognitive (online training) and behavioral (bedside observations and feedback) delivery methods. Additionally, the use of multiple delivery methods was intended to appeal to nurses of different backgrounds. The program provided standardized and scalable online video training to a large number of nursing staff members simultaneously. After this training, nurse managers performed follow-up observations of nurses’ communication behaviors and offered feedback.

Methods
The PatientSET program was implemented between quarters (Q) 1 and 4 in 2014 at a large nonprofit medical center in the Northeast with 775 total beds. The hospital is the largest provider of inpatient and outpatient services in the state. Eighteen units completed the PatientSET program during phase 1 (Q1 and Q2) and six units completed it.
during phase 2 (Q3 and Q4). A total of 1,574 nurses from all 24 hospital units that receive HCAHPS scores participated in this program.

Each nurse completed two online video training courses: PatientSET #4: Introduction for Nurses and PatientSET #5: HCAHPS Scenarios for Nurses in the Hospital Setting. These videos provided clinical scenarios produced with professional actors in the clinical setting. Nurses registered for these courses through a link sent to their e-mail address and received continuing-education credit for successful completion of each course. The courses took 1 hour to complete during regular hospital hours. The HCAHPS training course was designed to educate the nurses on the following HCAHPS domains: communication with nurses, responsiveness of hospital staff, pain management, communication about medications, and discharge information. Nurses were given 6 weeks to complete the online training.

After the online training, nursing communication behaviors were observed and recorded by nurse managers during bedside rounds. All observers were required to complete the online PatientSET Observation course before the observations. An electronic questionnaire was used to record the observations, and a dashboard view was delivered to hospital administration. A follow-up of 2,709 bedside observations occurred during our study period throughout 2014. Nurse managers were given 3 months to complete the bedside rounds observations.

Five HCAHPS survey items related to nursing were collected before, during, and after the training intervention (Q1 2013 to Q4 2015). The specific items were communication with nurses, responsiveness of hospital staff, pain management, communication about medications, and discharge information.

### Results
To evaluate the effectiveness of the training program, we compared the average hospital HCAHPS scores before and after the training in 2014. Hospital nursing HCAHPS scores were analyzed for preintervention (2013) and postintervention (2015) results.

There were a total of 6,856 HCAHPS surveys analyzed (3,037 from patients seen in 2013 and 3,819 from those seen in 2015). As noted in Table 1, all five nursing HCAHPS domains improved in the year following the intervention. The improvement was highest for the HCAHPS domain related to discharge information and was lowest for the domain associated with pain management. The top box HCAHPS percentile ranks for the hospital pre- and postintervention are depicted in Table 2. Although we aren’t drawing a causal relationship between the program and HCAHPS scores, both Table 1 and Figure 1 show nursing HCAHPS score improvement after the intervention.

The results of a logistic regression analysis of the effect of the training on the specific HCAHPS domains are presented in Table 2. Statistically signifi-

### Table 1: Comparison of HCAHPS scores pre- and postintervention

| HCAHPS domain                  | Preintervention: 2013 HCAHPS scores (N = 3,037) and top box percentile rank | Intervention year: 2014 HCAHPS scores (N = 4,606) and top box percentile rank | Postintervention: 2015 HCAHPS scores (N = 4,187) and top box percentile rank | Percent improvement pre- to postintervention | P value |
|-------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------|--------|
| Communication with nurses     | 81.5 (66th percentile)                                                        | 82.3 (73rd percentile)                                                        | 83.5 (76th percentile)                                                        | 15%                                         | .0266  |
| Responsiveness of hospital staff | 67.5 (55th percentile)                                                        | 68.8 (62nd percentile)                                                        | 71.3 (69th percentile)                                                        | 25%                                         | .0007  |
| Pain management               | 75 (78th percentile)                                                          | 75.2 (79th percentile)                                                        | 76.4 (83rd percentile)                                                        | 7%                                          | .1717  |
| Communication about medications | 62.6 (42nd percentile)                                                        | 66 (67th percentile)                                                          | 65.9 (62nd percentile)                                                        | 48%                                         | .0038  |
| Discharge information         | 82.8 (22nd percentile)                                                        | 84.8 (30th percentile)                                                        | 86.5 (39th percentile)                                                        | 77%                                         | <.0001 |

### Table 2: Top box HCAHPS percentile ranks for the hospital pre- and postintervention

| HCAHPS domain                  | Top box count 2013/2015 | Odds ratio (95% CI) | P value |
|-------------------------------|-------------------------|---------------------|--------|
| Communication with nurses     | 2.475/3.037: 3.496/4.187 | 1.149 (1.016-1.299) | .0266  |
| Responsiveness of hospital staff | 2.053/3.037: 2.985/4.187 | 1.190 (1.076-1.317) | .0007  |
| Pain management               | 2.278/3.037: 3.199/4.187 | 1.079 (0.968-1.203) | .1717  |
| Communication about medications | 1.901/3.037: 2.759/4.187 | 1.155 (1.047-1.273) | .0038  |
| Discharge information         | 2.515/3.037: 3.622/4.187 | 1.331 (1.169-1.514) | <.0001 |
significant associations were observed between the training intervention and the following HCAHPS domains: communication with nurses, responsiveness of hospital staff, communication about medications, and discharge information. After the training, patients were 15% more likely to be most satisfied with communication with nurses (OR = 1.149; 95% CI: 1.016 to 1.299; P = .0266). They were 20% more likely to be satisfied with the responsive hospital staff (OR = 1.19; 95% CI: 1.076 to 1.317; P = .0007) and 16% more satisfied with communication about medications (OR = 1.155; 95% CI: 1.047 to 1.273; P = .0083). And patients were 33% more likely to be satisfied with their discharge information (OR = 1.331; 95% CI: 1.169 to 1.514; P < .0001). The results showed that the training didn’t have a significant effect on patient satisfaction with pain management (OR = 1.07; 95% CI: 0.968 to 1.203; P = .1717).

All 1,574 participants completed a mandatory online evaluation after the course. Ninety-eight percent noted that they were satisfied with the course, 93% indicated that they would recommend the course to others, and 97% said that they expected their practice to change as a result of the activity. The nurses were also given an optional post-intervention survey. When asked if they preferred the online PatientSET video versus traditional lectures, 76% (210 out of the 278 respondents) preferred online education.

Limitations

When designing a project to improve patient satisfaction scores, it isn’t possible to control for other variables that can also impact these scores. Some of these variables in our study included the strength of unit leadership, nursing turnover, the unit’s culture, and quality improvement efforts with nurses of various backgrounds. Also, we didn’t look at non-nursing HCAHPS scores in this review.

Doing what works

This study demonstrates the efficacy of a hybrid training program consisting of online video education followed by bedside observations in increasing nursing HCAHPS scores. The discharge information domain had the highest improvement, whereas pain management had the lowest improvement. These results support the use of hybrid training programs by hospitals interested in improving nursing communication and HCAHPS scores.

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Douglas Finefrock is the author of the PatientSET program. He’s on the advisory board and a paid consultant for The Sullivan Group, which makes this program available for proprietary and nonproprietary use.

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