

**A Case Study: Patient Satisfaction Interventions in Acute Care Settings and Their  
Impact on HCAHPS Scores**

by

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Submitted to the Graduate Faculty of the  
Department of Health Policy and Management  
Graduate School of Public Health in partial fulfillment  
of the requirements for the degree of  
Master of Health Administration

University of Pittsburgh

2020

UNIVERSITY OF PITTSBURGH  
GRADUATE SCHOOL OF PUBLIC HEALTH

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April 1, 2020

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**Abstract**

Over the last decade, health systems have shifted resources towards patient experience, viewing patient encounters as events that begin from intake to discharge. A driver for this transition was the Centers for Medicare & Medicaid Services (CMS), which introduced the Value-Based Purchasing (VBP) system that emphasized a greater focus on quality, transparency, and lower cost. This transition to VBP led to a restriction on reimbursement that placed greater emphasis on the key measurable metrics of Mortality, Safety, Readmission Rates, and Patient Experience. To capture the patient experience metric values and display those to the public, CMS developed Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores. There are several vendors that collect patient satisfaction scores, the most prominent being Press Ganey, due to its ability to customize in-unit performance indicators, provide quick data returns, and large client database for comparison.

Literature from several institutions has shown the possible positive outcomes that can be achieved through the introduction of a supported patient experience initiative. In particular, the IMPACT program and the AIDET program at Northwestern Memorial Hospital have seen sustained improvement in patient satisfaction scores post-intervention.

The “Hush Campaign” carried out at West Penn Hospital in Pittsburgh, PA was an institution-wide program that sought to improve existing HCAHPS scores relating to “Quietness of the Hospital Environment” after trending lower scores than desired. Patient Experience staff along with nursing leadership developed a low-cost initiative to educate staff on the merits of quietness and its association with healthy outcomes. The intervention team developed trainings, posters, and later a daily reminder via the existing public address system to ensure the program’s success. With significant support from leadership and staff, this initiative overcame early setbacks and has seen both immediate and long-term success, in both HCAHPS scores and cultural adoption.

Patient satisfaction interventions show a clear public health relevance by having the potential to improve both clinical and quality outcomes for patient populations served. Furthermore, these interventions have the ability to drive HCHAPS scores on the CMS HospitalCompare.gov website allowing the public to make informed decisions about where they would like to seek care.

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## Acknowledgements

I would like to extend my sincerest gratitude to Dr. Wesley Rohrer for his incredible support and guidance throughout the writing process as well as the sagest advice during my time at the University of Pittsburgh. Furthermore, I would like to acknowledge Dr. Susan Simms for providing me with consistent encouragement while under her tutelage at West Penn Hospital, where she showed me the importance as well as the art of Patient Experience in healthcare and was therefore the catalyst for this essay. And finally, I would like to thank Dr. Elizabeth Schlenk, without whose experience, keen eye, and encouragement through the drafting process made this essay a reality. I could not have accomplished this endeavor without your support, passion and patience and cannot thank you enough.

## 1.0 Introduction

The last decade has seen healthcare institutions shift focus from solely clinical care to the overall healthcare experience for patients during their treatment, from intake to discharge. Much of this transition has to do with the shift in reimbursement benefits with Centers for Medicare & Medicaid Services (CMS) following the introduction of the Affordable Care Act (ACA) and the Hospital Comparison Report, which compares hospitals on a shared database. These data are collected by third party organizations, such as Press Ganey, who collect patient satisfaction measures including Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores, which collates and reports survey results ranging from overall rating, speed in which requests for care are answered, and nurse treatment with courtesy/respect, to environment quietness, and cleanliness. Much of this has to do with the manner in which reimbursement is handled by CMS; currently the breakdown is as follows, Mortality 22%, Safety of Care 22%, Readmission 22%, Patient Experience 22%, Effectiveness of Care 4%, Timeliness of Care 4%, and Effectiveness of Imaging 4%. With nearly a quarter of reimbursement tied to Patient Experience/Satisfaction, there has been development of robust Patient Experience departments, which focus on evaluating this data and developing strong programs to improve existing top-box scores. “Top-box scores” are the “most positive responses to HCAHPS survey items” indicating a positive hospital experience, where scores with a higher percentile indicate a higher “Top-box” score (HCAHPSOnline.org, 2018).

Therefore, the focus of this essay is on the success of patient satisfaction interventions on overall HCAHPS scores in an acute care facility. To accomplish this aim, this paper will discuss the existing patient satisfaction measurement tools, existing supporting literature/cases and the

actual intervention, and results accomplished at West Penn Hospital through their Hush Campaign in 2015.

## 2.0 What Is Patient Experience? Satisfaction?

According to the Agency for Healthcare Research and Quality (AHRQ),

*“Patient experience encompasses the range of interactions that patients have with the health care system, including their care from health plans, and from doctors, nurses, and staff in hospitals, physician practices, and other health care facilities. As an integral component of health care quality, patient experience includes several aspects of health care delivery that patients value highly when they seek and receive care, such as getting timely appointments, easy access to information, and good communication with health care providers.*

*Understanding patient experience is a key step in moving toward patient-centered care. By looking at various aspects of patient experience, one can assess the extent to which patients are receiving care that is respectful of and responsive to individual patient preferences, needs and values. Evaluating patient experience along with other components such as effectiveness and safety of care is essential to providing a complete picture of health care quality” (What is Patient Experience, 2016).*

This definition is different than that of Patient Satisfaction, which focuses on the patient’s perceptions of how the care was delivered (What is Patient Experience, 2016). This difference can be explained as the following: A patient arrives at a hospital with initial expectations on the standard of care that they are about to receive → Patient receives treatment → Outcome results in perceived treatment based on patient’s previously perceived expectations. Patient experience is the next level of expectation that can only build upon the successful execution of that initial standard. This difference does not mean the satisfaction and experience are mutually exclusive, but rather

that experience is impacted by the outcome and overall expectation of a patient thereby resulting in a patient's satisfaction score.

### **3.0 Patient Satisfaction Survey/Measurements**

#### **3.1 Press Ganey**

Press Ganey Associates was founded in 1985 by Irwin Press, PhD and Rod Ganey, PhD with the purpose to “support health care providers in understanding and improving the entire patient experience” (About Press Ganey, n.d.). They have accomplished this through the development and utilization of surveys designed for patients to ascertain the patients’ overall satisfaction with the care, and environment encountered at the hospital in which they stayed. Currently, Press Ganey is the global leader in tracking patient satisfaction and serves over 10,000 medical institutions and is a strategic business partner to over 26,000 healthcare institutions.

Press Ganey Associates is one of the primary survey providers utilized by CMS and HCAHPS to collect patient satisfaction data. Health institutions have the opportunity to view all collected data through the Press Ganey Portal, which allows for analysis of data as recent as 2 weeks prior by unit/department and overall hospital. This process allows health systems to identify and track certain department’s performance and enact direct interventions to see improvement.

#### **3.2 Why Do Hospitals Choose Press Ganey?**

Press Ganey is not the only HCAHPS vendor in healthcare, but it is one of the most recognized brands. Other vendors with a market share are Health Stream, NRC Picker, PRC, Avatar, and JL Morgan. Becker’s Hospital Review polled 396 hospital CEOs asking who they

selected for their vendor; 52% said Press Ganey, and the second largest share was Health Stream at 16% followed by NRC Picker at 12%. When asked what evidence resulted in their HCAHPS vendor selection, data found that executives showed a willingness to recommend Press Ganey vendor with an 8.2 overall satisfaction score. Press Ganey also scored the highest in satisfaction of analytics reports at 4.1 and second highest in additional survey questions that allowed the capturing of secondary data (4 Statistics on HCAHPS Vendor Use, 2016).

### **3.3 Limitations of Press Ganey Surveys**

Most Press Ganey results are limited for several reasons. First, the rate for returned surveys can be low, which often requires an adjustment of sample size. This limitation is due to a generally low response rate from discharged patients; however, this does not mean that there are not enough data to be statistically actionable, just that Press Ganey suggests a sample size of  $N > 30$ . This low response rate is validated in the case of West Penn Hospital where return rates are close to the national average of 35%. Second, there is a potential for mailing addresses of Press Ganey surveys to be incorrect or if sent digitally, forwarded to the spam file, likely resulting in a non-response (Wolf & Palmer, 2013). Furthermore, patients are not required to answer all question in a survey, and though the patient may return a survey, the survey may have unanswered questions, which contributes to missing data. Third, small sample size of returns is often not a true reflection of the performance of a unit or hospital. It is often the role of staff to educate and encourage patients to complete and return surveys as a key actionable item to improve rates of returns.

### 3.4 HCAHPS

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a national publicly reported survey of a patient’s perspective of care. The purpose of this survey is to create a national standard for “collecting” and “publicly reporting” patient experiences and allowing comparison across participating institutions. Since 2010, with the passing of the Affordable Care Act, HCAHPS has been used as a measure to “calculate value-based incentive payments” in The Hospital Value-Based Purchasing Program (2020). Value Based-Purchasing shifted healthcare away from the fee-for service model towards one that promoted a greater focus on quality of care and outcomes as well as an overall improved experience for patients. This model continued to reduce adverse events, advocate for the adoption of evidence-based standards of care, increase the transparency of healthcare for patients, and provide a lower cost while improving care for Medicare (The Hospital Value-Based Purchasing Program, 2020). What truly sets the Value-Based Purchasing apart is, though it was geared towards Medicare payments, it has a strong consumer driven focus that ties heavily into patient experience and overall satisfaction with care received. According to CMS, HCAHPS has three goals:

- First, the survey is designed to produce data about patients' perspectives of care that allow objective and meaningful comparisons of hospitals on topics that are important to consumers.
- Second, public reporting of the survey results creates new incentives for hospitals to improve quality of care.
- Third, public reporting serves to enhance accountability in health care by increasing transparency of the quality of hospital care provided in return for the public investment.

(ibid.)



The inpatient HCAHPS portion of the survey consists of 32 questions relating to the patient's inpatient stay or outpatient visit. Of these 32 questions, there are 26 questions and 8 domains that are considered "core questions" that focus on the following topics (see Table 1):

- "Communication with nurses" and "Communication with doctors"
  - "Clear communication about healthcare information is integral to a positive healthcare experience" (PatientEngagementHIT, 2017). Given that patients often arrive to the healthcare facility in a state of distress, it is imperative that they are communicated with in a clear and concise manner to ensure sufficient understanding allowing the patients a greater degree of autonomy regarding their care experience. Furthermore, effective communication also encompasses empathy and respect, key metrics when it comes to patient satisfaction as patients expect and deserve compassion by providers and staff during their stay.
- Responsiveness of hospital staff
  - Attentiveness is a key factor in HCAHPS where a common metric used in-house is the time it takes for a staff-member to respond to a "call nurse" signal when triggered. This metric has been addressed with the introduction of "purposeful" hourly rounding where nurse's check-in with patients asking if they require any services or any other assistance at that moment. This is a proactive measure where staff attempt to address needs instead of reactively responding to needs through answering the nurse call.
- Cleanliness and Quietness of the hospital environment
  - Cleanliness typically focuses on a patient's perception of the cleanliness of their room and bathroom; however, this question can also be influenced by other areas

visited by the patient in the hospital (Ketlesen, 2014, p. 302). Furthermore, this question encompasses the concept of how “clean” a room is, but can also include issues of clutter, old or broken furniture, or how well Environmental Services (EVS) communicates with patients during their stay (Ketlesen, 2014, p. 303).

- The American Hospital Association (AHA) has set guidelines indicating that hospitals should facilitate an environment that is suitable for “patient rest and recovery” (Kenney, & Martin, 2016). Patients are acutely aware of background noise, such as loud talking, during recovery, especially since there is little to soothe their anxieties or calm their nerves in their rooms. Furthermore, the AHA has published “Data showing that noise in hospitals is the factor that scores lower on HCAHPS scores nationwide” (PatientEngagementHIT, 2017).
- Communication about medicines
  - This question relates to specific communication addressing the needs of the patient, e.g., that the medication being given is explained to the patient, including its purpose, and side effects, etc.
- Discharge information
  - This question relates to whether healthcare providers communicated with the patients about their discharge process and any necessary follow-up. Often this information entails the name of the follow-up provider and walkthrough of the paperwork and expected recovery period. For more complex medical conditions for home bound patients, a provider may order homecare for the patient and a proper discharge plan in place.
- Rate the hospital

- The question relates to the overall experience the patient had at the hospital from intake to discharge and typically only counts as a rating of >8. The reason is that scores of 9 and 10 are viewed as top scores, which are counted towards pay-for-performance scores, whereas scores of 7-8 are viewed as scores that can be brought up through certain interventional actions that have the potential to improve overall scores and performance reimbursement.
- Likelihood to recommend the hospital
  - This question focuses on the retention rate of patients as well as the word of mouth potential for high scoring patient satisfaction (PatientEngagementHIT, 2017).<sup>1</sup>

**Table 1 HCAHPS Domain Breakdown**

<b>Domain Breakdown and Question Association</b>		
<b>Composite Topic</b>	<b>Domain</b>	<b>Question Numbers</b>
	Nurse Communication	1, 2, 3
	Doctor Communication	5, 6, 7
	Responsiveness of Hospital Staff	4, 11
	Communication about Medicines	13, 14
	Discharge Information	16, 17
	Care Transition	20, 21, 22
	<b>Individual Topic</b>	Cleanliness of Hospital Environment
	Quietness of Hospital Environment	9
<b>Global Topic</b>	Hospital Rating	18
	Willingness to Recommend Hospital	19

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<sup>1</sup> \*A note regarding Pain Management questions: The Pain management Domain and associated questions were removed by CMS in 2016 (PatientEngagementHIT.com, 2017). The reasoning for this was due to CMS seeking to “eliminate any financial pressure clinicians may feel to overprescribe medications” as a result of the current opioid crisis (American Society of Anesthesiologists, 2016). This removal does not mean patient discomfort has been ignored, rather CMS has indicated it is working on question alternatives relating to responsiveness by staff to requests by patients regarding discomfort or other adverse reactions, which are incredibly important.

HCAHPS surveys are administered to a random sample of adult patients who have been discharged for at least 24 hours and up to 6 weeks. Surveys are distributed either by phone, e-mail, mail, or interactive voice recognition (IVR). Participating healthcare facilities may use all or some of these methods. Hospitals have the opportunity to include additional custom questions beyond the initial 32. According to the CMS, surveys are available in the following languages: English, German, French, Spanish, Mandarin, Russian, Vietnamese, and Portuguese (HCAHPS: Patients' Perspectives of Care Survey, 2020).

Press Ganey scoring can be explained through the breakdown of mean score (standard questions), top-box scores (HCAHPS) and percentile rank (both standard and HCAHPS. Top-Box Score and Percentile Rank are defined in the Press Ganey (2013) "Quick Guide for Quick Reports", the tool often utilized to allow users to create a personalized metric comparison site:

- Mean Score (standard questions): The mean score is the average score for a standard question, section, or overall. Press Ganey standard questions, sections, and overall scores can be calculated as mean scores. HCAHPS Care Transition Questions can also be calculated as mean scores.
- Top-Box Score: The top-box score is the percentage of responses in the highest possible category for a question, section, or survey (e.g., percentage of 'Very Good,' or 'Always' responses). All HCAHPS metrics are calculated as top-box scores (excluding HCAHPS Care Transitions, which can be calculated as mean scores or top-box scores). Press Ganey questions, sections, and overall scores may also be reported as top-box scores.
- Percentile Rank: A percentile rank tells you where your score falls in relationship to other institution scores. Percentile rank for any given metric in any peer group is determined by ordering all facilities' scores from highest to lowest, then each score receives a percentile

rank by determining the proportion of the database that falls below that score. For example, if your percentile rank is 30, you are scoring the same as or better than 30% of the organizations to which are you compared (Press Ganey, 2013).

This data can be seen represented in Figure 1 below for a layout of a mock quick report generated by the online Press Ganey analytics program.

Data are reported on a quarterly, rolling basis and published on [hospitalcompare.hhs.gov](https://hospitalcompare.hhs.gov) for the general public to view. Hospitals have the ability to view their own current scores via the Press Ganey portal to be discussed later. This time frame does indicate a lag time for available data of at least three months, one quarter, for consumers. For example, West Penn Hospital has data most recently published for January 29, 2020, the previous quarter available being data from October 30, 2019 (Data Updates, 2020). Outside of the issue of lag time, CMS has incorporated adjustments to account for variability in patient demographics or other performance variables that are provided by HCAHPS to prevent any advantages or disadvantages that may be present between health institutions. This is called the “patient mix-adjustment” and is utilized to balance patient demographics, patient mix, and general systematic difference between survey modes (Press Ganey, 2019).

# INPATIENT REPORT

## 13.0 Unit Analysis

This section allows for side-by-side comparison of units within your hospital. The section shows overall, section, and question mean scores for each of your units. For reference, the mean scores for your entire hospital are listed in the first column of data. The mean scores for each unit's top ten priorities (based on the Internal Priority Index for each unit) appear in **bold italics**; superscripts indicate the priority number.

Overall Section Question	Hospital n=496 Mean	3100 n=92 Mean	4100 n=103 Mean	5400 n=98 Mean	7100 n=115 Mean	8100 n=88 Mean
<b>Central General</b> <sup>1</sup>	86.1	86.2	85.6	87.0	86.7	85.1
<b>Admission</b> <sup>2</sup>	85.4	86.4	83.6	86.4	85.9	84.6
Speed of admission	82.4	83.5	80.5	81.6	84.4	81.8
Courtesy of person admitting <sup>3</sup>	88.6	88.5	86.6	91.5	88.2	88.6
<b>Room</b>	81.9	81.2	81.8	84.3	82.5	79.2
Pleasantness of room decor	82.6	<b>83.3<sup>5</sup></b>	83.3	84.8	<b>82.4<sup>6</sup></b>	<b>79.1<sup>9</sup></b>
Room cleanliness	83.9	82.7	83.0	87.8	86.6	<b>78.7<sup>2</sup></b>
Courtesy of person cleaning room	86.8	85.2	87.8	88.0	87.5	85.0
Room temperature	80.5	78.0	80.6	<b>82.9<sup>9</sup></b>	81.4	79.4
Noise level in and around room	75.9	76.9	75.5	78.5	74.6	74.2
<b>Meals</b>	79.4	79.3	79.0	79.3	80.8	78.5
Temperature of the food	77.7*	80.3	<b>77.5<sup>10</sup></b>	75.8	<b>76.4<sup>9</sup></b>	79.1
Quality of the food	73.1	70.7	<b>70.5<sup>9</sup></b>	<b>75.0<sup>3</sup></b>	76.9	71.8
Courtesy of person served food	87.3	86.5	89.3	87.1	88.2	84.9
<b>Nurses</b>	89.3	89.5	87.9	90.0	90.1	88.9
Friendliness/courtesy of the nurses	92.1	91.9	90.8	92.9	94.0	90.3
Promptness response to call	85.8	86.4	85.6	<b>87.6<sup>9</sup></b>	<b>84.3<sup>4</sup></b>	<b>85.1<sup>7</sup></b>
Nurses' attitude toward requests	90.5	91.2	88.8	90.8	92.1	89.7
Attention to special/personal needs	89.2	88.8	<b>87.8<sup>9</sup></b>	90.7	89.4	89.5
Nurses kept you informed	86.9	<b>86.5<sup>3</sup></b>	<b>84.5<sup>3</sup></b>	87.8	88.0	<b>87.6<sup>10</sup></b>
Skill of the nurses	91.2	92.6	90.3	91.4	91.7	89.9
<b>Tests and Treatments</b>	87.3	88.9	88.3	87.2	86.8	85.6
Wait time for test or treatments	81.1	<b>83.3<sup>3</sup></b>	<b>81.9<sup>4</sup></b>	82.0	81.6	<b>76.5<sup>4</sup></b>
Explanations happen during T&T	88.6	89.7	87.8	87.9	88.1	89.5
Courtesy of person took blood	89.4	90.0	90.7	<b>87.4<sup>4</sup></b>	89.9	88.9
Courtesy of person started IV	90.9	92.8	91.3	90.9	88.9	90.3
<b>Visitors and Family</b>	87.5	86.6	85.6	89.3	89.0	86.8
Accommodations & comfort visitors	85.6	85.1	<b>82.5<sup>5</sup></b>	89.2	<b>87.6<sup>9</sup></b>	<b>83.3<sup>4</sup></b>
Staff attitude toward visitors	89.7	<b>88.2<sup>5</sup></b>	89.4	90.2	90.3	90.2
<b>Physician</b>	88.7	88.0	87.2	89.2	90.5	88.5
Time physician spent with you	83.9	85.8	<b>81.3<sup>1</sup></b>	84.1	83.7	85.1
Physician concern questions/worries	88.8	89.2	87.6	88.8	91.1	87.1
Physician kept you informed	86.8	<b>85.4<sup>5</sup></b>	85.8	<b>86.1<sup>6</sup></b>	88.9	87.7
Friendliness/courtesy of physician	91.7*	90.2	91.1	92.0	93.6	91.3
Skill of physician	93.2	90.1	91.7	95.8	94.9	93.1

Continued...

n Number of questionnaires

Top ten priority (based on Internal Priority Index)

\* Significantly different at .05 level

For an overview of how to interpret this report page, click or visit the following Web page:  
<http://www.pressganey.com/gi/gt15.htm>



Find solutions, learn best practices, and network with colleagues in other health care organizations  
<https://www.pressganey.com/forum>

**Figure 1 Mock Press Ganey Standard Questions Unit Score Return with Priority Index Questions**

Reprinted from Guide to Interpreting (Press Ganey, 2014, p. 43)

## 4.0 Literature Review

Given that health systems are focusing more on patient satisfaction scores due to their impact on reimbursement as well as patients' perceptions of an institution, there is an established history of successful interventions and studies carried out. Many of these interventions support a clear association between intervention and sustained HCAHPS score improvement. The following selected literature samples showcase interventions that identified clear declines in patient satisfaction scores and set clear goals that recovered or improved their overall scores.

Examples of globally implemented Patient Satisfaction interventions can be seen in the IMPACT program, which was instituted in a 210-bed, level III community-based acute care hospital after seeing HCAHPS scores that were below national averages. (Keith, 2015). The program itself was a focused "situational leadership assessment model" that engaged leaders in evaluating their staff members on their performance in particular situations. There were two training bundles, one for nurses and a second for ancillary staff. The nursing bundle incorporated purposeful hourly rounding, bed shift reports, use of whiteboards, patient communication, medication explanation, timeliness to patient need requests, and overall patient experience. The ancillary service bundle included room cleanliness and overall patient experience (Keith, 2015). After the 8-hour session, the leadership that participated was tasked with setting a standard expectation known as a "gold standard", which was to be the performance standard for all patient interactions.

As a follow-up to the initial training, thirty days later a staff performance review was performed where all staff were assessed on the assessment model and expected "gold standard". Any staff person who failed to meet these criteria was then placed on a 60-day re-training period

for corrective action. The reason for this harsh protocol was, per the organization, accountability, even though there existed a risk of increased turnover and feelings of persecution amongst staff. Results from this study indicated strong returns in HCAHPS scores with overall hospital satisfaction scores ranging from the 75.6 percentile to the 78.2 percentile (Keith, 2015).

A second intervention was implemented at Northwestern Memorial Hospital (NMH, an 897-bed Level III teaching hospital) in Chicago and focused on patient satisfaction scores pre- and post-implementation of a communication-skills training program for the entire NMH hospitalists. Patient satisfaction survey data were compared pre- and post-intervention as a basis to measure success. The intervention period was measured over the course of 22 weeks after initial training.

The training program consisted of three 90-minute training sessions, which were based on the AIDET (Acknowledge, Introduce, Duration, Explanation, and Thank You) concepts as designed by the Studer Group consulting firm. The program was modified specifically for physicians in the following ways, “to emphasize reflection on current communication behaviors, deliberate practice of enhanced communication skills, and feedback based on performance during simulated and real clinical encounters. These educational methods are consistent with recommended strategies to improve behavioral performance” (O’Leary, Darling, Rauworth, & Williams, 2013). This training was first led by a patient-experience administrative leader and included unit medical directors. Findings after a 22-week period showed increases in patient satisfaction relating to overall patient satisfaction of two percentile points, from 73 to 75. However, the study did note that only 40% of hospitalists participated in the training, and that a stronger position and investment by leadership might have entailed more robust results.

Though data did not show strong results in some studies, improvement was seen across the board in most departments. Limitations and weaknesses seen were attributed to either lack of



adherence to trainings or lack of buy-in by staff. Overall, the collaboration between nursing, physicians, and Patient Experience staff showed that improvement can be achieved; however, sustainment was an entirely separate matter.

University of Utah Health Care System is a five-hospital academic health system, with twelve clinics in the Salt Lake City metropolitan area with a referral area that encompasses 10% of the continental United States. In 2008, the health system was met with a high number of patient complaints ranging from “delays, poor communication, inadequate care coordination, and a lack of professionalism”. HCAHPS “Rate this hospital’s performance ratings ranked in the 34<sup>th</sup> percentile nationally” (Lee et al. 2016). Rather than try to institute change in a single hospital, the University of Utah Health Care System attempted a change throughout the whole health system through their Exceptional Patient Experience (EPE) initiative, which was started in February 2008.

While in an offsite retreat, executive leadership met with medical and administrative leaders to identify five root causes for the failure in service and the drop in quality that resulted in the poor scores: a lack of good decision making processes, a lack of accountability, the wrong attitude, a lack of patient focus, and mission conflict. With these root causes, clinical faculty were paired with administrators who were tasked with building solution plans. What arose was the EPE initiative, which was the implementation of a leadership in culture change by shifting physicians to new clinical leadership roles as service line directors and creating electronic questionnaires that resulted in an increased response rate (19.1%). This initiative was paired with a value-based employment incentive, which rewarded staff for delivering an “exceptional patient experience” as well as rewarded recruiters for seeking recruits who had qualities that met with EPE values.

What resulted was an increase in patient satisfaction scores in the University of Utah Health Care System from 34<sup>th</sup> percentile rank in 2008 to the 51<sup>st</sup> percentile rank in 2009, 77<sup>th</sup> percentile rank in 2011, and 80<sup>th</sup> percentile rank in 2014.

Homestead Hospital is a 142-bed acute care hospital that is part of the Baptist Health South Florida Health System. After experiencing a decline in patient satisfaction scores on their Medical Surgical Unit, the Unit Practice Council of the hospital proposed an initiative to improve scores. This initiative focused on “communication among stakeholders, such as patients, family members of patients, and nurses”. The initiative was called the “CARE Initiative”. CARE being an acronym for Courtesy, Attitude, Respect, and Enthusiasm when first engaging with any patient or their loved ones for the first five minutes. It focused on the utilization of existing concepts such as the Plan, Do, Check, Act model to lead the improvement process and promote sustainability. This initiative was accomplished by utilizing the existing white boards in patient rooms to create a “wish list” to document “attainable goals” for pain, call response, or comfort. The result of this initiative saw a mean increase in HCAHPS scores from the mid-80 percentile to the mid-90 percentile over the course of 5 weeks (Gaitan, Stainton Bacon, & Pena, 2019).

Sarasota Memorial Hospital is an 839-bed acute care hospital located in Sarasota, Florida. The hospital serves a region where 25% of the population admitted is over 80 year of age (Reynolds, Halls, & Jones, 2018). In 2017, the administration noticed a decrease in the patient experience scores among patients aged 80 years and older and began the Patient Experience for Acute Care Elders (PEACE) Initiative.

The primary manner that the hospital sought to address the lapse was surveying the population directly, creating focus groups of patients, engaging frontline caregivers, and developing stronger communication between both. As a result, they developed a “Geriatric

Resource Nurse (GRN) to be the primary contact person for PEACE project goals and who would undergo specific training to understand specific needs for geriatric patients. Also, Emergency Department leaders would be trained to become Geriatric Emergency Nursing Education Certified and play a key role educating Emergency Department staff on how to communicate and assess needs of older patients.

Results since the implementation of the PEACE program among the target population have shown improvement in “9 of 11 HCAHPS domains”, in particular a 5-point increase for responsiveness of staff and a 6-point improvement for communication of medications as well as a 4-point improvement in overall rating (Reynolds et al., 2018). A takeaway from this study was that segmentation of niche groups allows for a narrowed focus of improvement. Given that the larger portion of younger populations served had satisfactory experiences, the authors recommended examining existing programming and modifying those to suit niche population needs when implementing a patient experience initiative on a small scale.

## **5.0 The West Penn Hospital Hush Campaign**

### **5.1 Allegheny Health Network**

Allegheny Health Network (AHN) is an integrated health delivery system (IHDS) that serves the Western Pennsylvania region as well as Western New York. Headquartered in Pittsburgh, PA, AHN is a non-profit, ten-hospital medical system, which was founded in 2013 when Highmark Health, a Blue Cross Insurance Provider, purchased a series of hospitals in Western PA. Allegheny General Hospital is AHN's flagship hospital, and sole quaternary site, while four tertiary hospitals, Jefferson, Saint Vincent, West Penn Hospital, and Forbes, serve the greater Pittsburgh region along with four smaller community hospitals and a series of newly opened "neighborhood micro-hospitals" throughout the region. Currently, AHN employs over 21,000 staff and 2,500 physicians and in 2018 admitted over 120,000 patients with 280,000 Emergency Room visits. What sets AHN apart from other IHDS is that it was founded by a health plan rather than a clinical organization, giving it greater cost control over its financial care strategies. Since 2017, all AHN Patient Experience operations have been centralized through AHN corporate headquartered at the Highmark building in downtown Pittsburgh, which allows standardization in strategy and policy implementation throughout the entire health system.

## **5.2 West Penn Hospital**

West Penn Hospital is a one of the major inpatient facilities affiliated with the AHN that serves the Pittsburgh region, but predominantly the Lawrenceville/Bloomfield community. West Penn Hospital is a 361-bed private, acute care hospital that has been in existence since 1848. West Penn Hospital specializes in rehabilitation and neo-natal care services, with an obstetrics unit that delivers over 4,000 babies annually. As a regional leading provider, West Penn Hospital has been acknowledged as a Watson top 100 Hospital, and is known for its excellence in patient care, quality of care, and service. West Penn Hospital has been Magnet designated since 2006 and finishes in the top 10 nationally in inpatient safety (West Penn Hospital, 2020). West Penn Hospital adheres closely to Allegheny Health Network's values striving to develop trust, integrity, customer-focused collaboration, courage, innovation, and excellence with a "people-matter" focus in all manners of care and customer interaction (Highmark Health Mission, Vision & Values, 2019). Patient experience needs are handled by the Service Recovery Specialist and the Patient Experience Manager. Every week the Patient Experience Manager reviews key patient satisfaction scores from the previous week and provides patient comments for trending.

## **5.3 Problem Statement**

In Quarter 3 of 2015, internal discussion began at West Penn Hospital surrounding HCAHPS scores that included the Hospital Environment domain as a result of Press Ganey data showing a rise in patient comments relating to a lack of quiet in AHN facilities. Existing literature has indicated a strong correlation between sleep and overall wellbeing (Maidl, Leske, & Garcia,

2014). In a hospital environment where recovery is the primary focus for patients post procedure, there has been an association between sleep deprivation and falls, medication adherence, restraint use, and delirium among critical care patients (Maidl et al., 2014). More importantly are the data showing the relationship between length of stay and decreased rest among patients. Thus, in the second half of 2015, West Penn Hospital sought to initiate a program to improve overall patient rest and recovery through a patient satisfaction intervention.

#### **5.4 Intervention**

In August 2015, the West Penn Hospital leadership met to discuss ways to improve and sustain improvement of the existing HCAHPS percentile rank score of “Quietness of the Hospital Environment” per recent internal Press Ganey publications. This meeting was prompted by the review of the official Press Ganey scores from the previous several months, which indicated an average “Quietness of the Hospital Environment” score falling to the mid-60 percentile in comparison to the national average. It was concluded by the council that overall patient experience, specifically the Hospital Environment domain, could be improved along with enhanced “Quietness of the Hospital Environment” scores through the introduction of a set series of “Quiet Times” throughout the day, every day, on all patient units throughout the hospital.

Before steps could be made to initiate this intervention, several possible barriers were identified. The greatest barrier was a concern that there would be difficulty in general buy-in from the hospital key leadership team members, department heads, and general staff (nursing and ancillary). The overriding fear was that there would be push back given that the introduction of quiet time could impact the timing of patient testing and care, and therefore result in lower patient

outcomes. This concern was countered with clear evidence from scholarly journals, in particular Maidl et al. (2014), that supported the assertion that quiet environments promoted healing and recovery. This evidence was utilized in a series of briefings to win support of nursing leadership on the merits of the initiative. The initiative described was to take place twice a day, 2 p.m. to 4 p.m. and 10 p.m. to 7 a.m. where lights in units were to be dimmed, doors closed as appropriate, and voices lowered, effectively creating a “more restful environment” for patients. The Rehabilitation unit was the only unit that did not comply with the initiative due to care concerns, citing the reason that the 2 p.m. to 4 p.m. time period chosen to enact quiet time coincided with the rehabilitation patients receiving rehabilitation treatment in physical therapy rooms as well as throughout all areas of the Rehabilitation department, and both staff and patients require light and could not guarantee the ability to minimize sound. Alternative times were sought with Rehabilitation unit management, but the consensus was that the unit required too much floor movement of staff and patients to allow safe execution of a set “Quiet Time” particularly with lowering the lights. With support of the staff nurses, executive leadership approved the introduction of a standard “Quiet Time” to take place every day at 2 p.m. to 4 p.m. and at night from 10 p.m. to 7 a.m. This intervention was referred as the “Hush Campaign”.

“Quiet Time” was introduced to department leaders by the Patient Experience Program Director at West Penn Hospital who designed a PowerPoint training session presented at the monthly Department Head meeting. This session reiterated the findings presented to the executive team relating the benefits of designated quiet times and patient recovery as well as the expectations of staff. The expectations being that units were to “turn down the lights” and refrain from talking “loudly” on the unit and directly outside patient rooms. Department heads were expected to disseminate this information to their staff in unit meetings creating a general “awareness” as this

was a more “cultural shift” based intervention. Over the following few weeks after the initial roll out, the West Penn Hospital Chief Nursing Officer would round on unit floors and check if units were adherent to the new policy reminding staff of the new policy and manually turning down the lights.

### **5.5 Initial Results and Follow-Up**

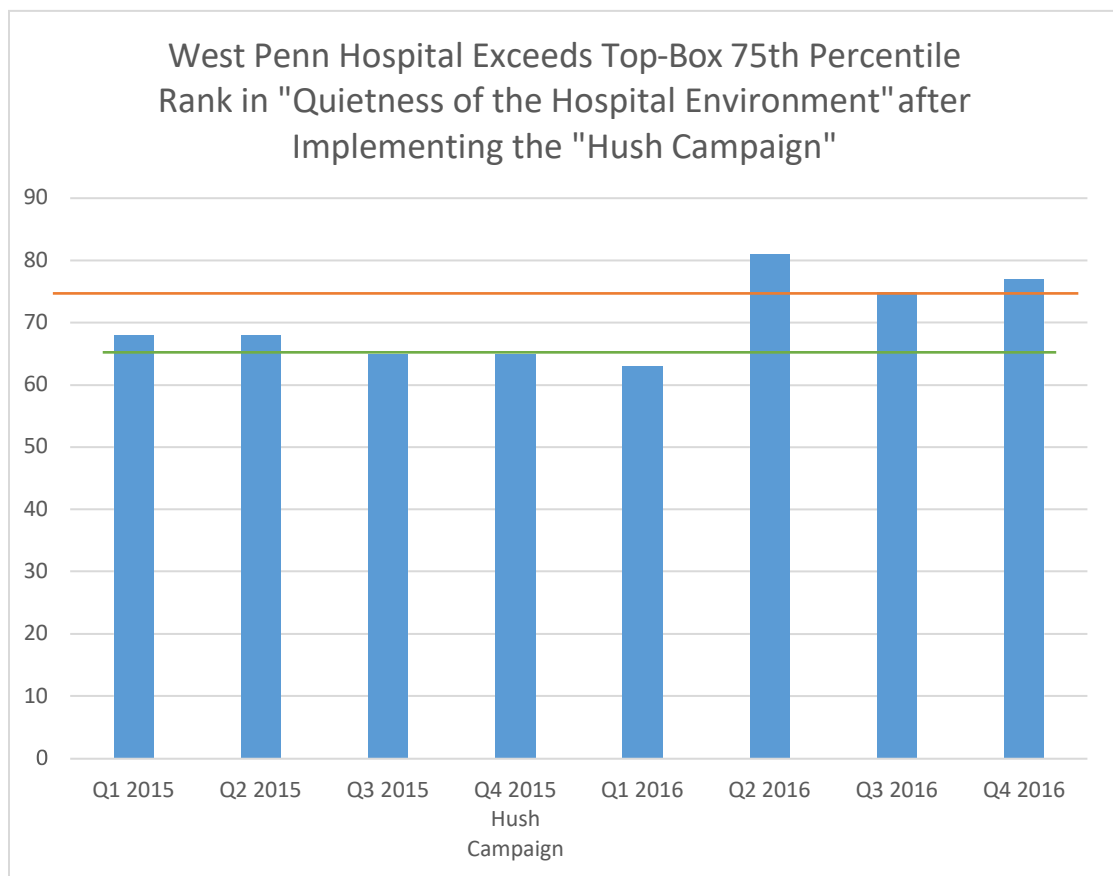
By September 2015, West Penn Hospital’s Press Ganey HCAHPS “Quietness of the Hospital Environment” percentile rank increased from the mid-60 percentile to nearly the 70<sup>th</sup> percentile. However, this result was not sustained as by the following month of October, the score dropped nearly 13 points to the 57<sup>th</sup> percentile.

The immediate drop in the “Quietness of the Hospital Environment” HCAHPS score led the Patient Experience Program Director and Nursing leadership to investigate possible causes for the failure. Investigation indicated that adherence to “Quiet Time” had dropped among staff and was often not practiced by visitors. To raise awareness once again, posters were designed for each unit, with the unit managers holding their finger to their lips indicating “shhhhhh!” while in large block letters underneath it is “QUIET PLEASE” and the set times designated for quiet time. These highly visible posters were then placed in key locations in each unit and on all floors in key public places as visual reminders for staff and visitors. This initiative saw the West Penn Hospital’s HCAHPS score in Quietness recover to the mid-high 60<sup>th</sup> percentile. However, by the end of Quarter 1 2016, a second and final dip occurred, which prompted the addition of a final intervention. The final intervention was that of an audio reminder, which was broadcast via the public address (PA) system every day at 1:55 p.m. announcing:



*“Quiet Time will begin in all patient units at 2 p.m. Lights will be dimmed on the units. We ask all staff and visitors to please lower their voices to help create a restful environment.”*

This final intervention saw the Quarter 2 percentile rank increase to 80<sup>th</sup> percentile before it would plateau for the following two quarters around the 75<sup>th</sup> percentile. This result can be seen in Figure 2 and Table 2 below where the green trendline shows the upward trend success of the interventional strategies, while the orange line indicates the mean top-box score goal. After the introduction of the audiological component, the percentile never dropped below the stretch goal percentile as of Quarter 4 2016. As of CY 2019, the top-box score for “Quietness of the Hospital Environment” was 68.3% which is the 79<sup>th</sup> percentile, indicating that the intervention has sustained its percentile ranking scores from Q4 2016.



**Figure 2 HCAHPS Scores from Q1 2015 to Q4 2016 along with Sketch Goals for *Quietness of the Hospital Environment***

**Table 2 HCAHPS Scores from Q1 2015 to Q4 2016 along with Stretch Goals**

	Q1 2015	Q2 2015	Q3 2015	Hush Campaign Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Top-Box Percentile	66	68	65	65	63	81	75	77
Stretch Goal Percentile	75	75	75	75	75	75	75	75

## **5.6 Conclusion**

The primary focus of the “Hush Campaign” was to create a sustainable intervention that could impact both patient satisfaction scores and patient recovery. What this intervention indicates is that initial attempts to improve patient satisfaction scores were not sustainable with only staff trainings or visual cues. Rather, the inclusion of a third reminder, the audiological cue, with the PA reinforcement, allowed for a daily check that resulted in greater vigilance and sustainability. The effects of this additional intervention can be seen in the consistent scores achieved at or above the 75<sup>th</sup> percentile stretch goal for three quarters, nearly double the length of time showing improved scores for the two previous interventional attempts. This result does not indicate that the attempts were failures, rather it provides evidence that even though improved results were not initially sustained, support of the intervention through its early struggles, and continuous refinement, contributed to its success and sustainability.

Furthermore, this intervention helps further the supposition that patient experience initiatives have the ability to increase HCAHPS scores. A final takeaway is that sustained buy-in and support from executive and nursing leadership has allowed this initiative to continue for the

last five years resulting in a true culture shift, where “Quiet Time” is a daily norm, broadcasted every day, even on electronic bulletin boards posted throughout the hospital in areas such as the cafeteria and hallways showcasing that sustainability can result in change.

## **5.7 Limitations**

As mentioned previously in the Limitations of Press Ganey Surveys section of this essay, this intervention too falls prey to some of the same limitations. Given that there is always a potential for low return rates in surveys and low sample sizes, the data may not be a true representation of patient satisfaction. West Penn Hospital falls close to the previously mentioned national average of 35%, with a 33.9% return rate on surveys, where 55% of discharged inpatients are surveyed. West Penn Hospital also avoids much of the typical issues of low undeliverable mail, due to procedures in-place that verify both mailing and email addresses of patients. Furthermore, data collected in this project were based on time of discharge rather than received date, which means that results had a 45-day lag time, so data shown on the graph for the month of September was collected after November 15<sup>th</sup>, so the interventions or implemented actions had a lag time success more representative of the Q1-Q2 2016 data. West Penn Hospital now utilizes a data collection method that follows the “received date” method for more sensitive data analysis. Furthermore, given the general subjectivity of “quiet”, it is difficult to ascertain true objective measurements for sound disturbance, outside of Press Ganey complaints, which can be trended and reviewed. Continued success of this program over the past four years seems to indicate a general positive relationship between this intervention and its results; however, these data were not made readily available to this researcher.

## 5.8 Recommendations

West Penn Hospital's "Hush Campaign" has seen a success as a result of evidence-based interventions with strong leadership support, consistent long-term intervention focus, and the fact it was a very low-cost to implement. Several lessons can be taken away from the "Hush Campaign" that could benefit other health institutions that attempt to implement a sustainable change. First, the formalization of the roll-out of the training to staff could have had a bigger impact on the adherence of initial attempts of instituting "Quiet Time". Also, formalized floor auditing for adherence rather than relying on Press Ganey results may have had a more immediate return and opportunity for intervention. Also, though adopted later, the utilization of received date rather than discharge date for data analysis would be more reflective of the initiative. Getting data by received date has the advantage that it is more current, and thus immediately actionable; however, data can be tainted by surveys submitted by someone who was discharged up to 12 months prior. Fortunately, this issue is not considered the norm as most surveys are returned by patients who were discharged 4-6 weeks prior. But the greatest triumph and continued recommendation was the successful communication and coordination between Patient Experience and Nursing Leadership throughout the entire project, indicating the clinical care initiatives involving patient welfare and experience require the cooperation between both.

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