Promising Practices for Achieving Patient-centered Hospital Care

A National Study of High-performing US Hospitals

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Background: Patient-centered care is integral to health care quality, yet little is known regarding how to achieve patient-centeredness in the hospital setting. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey measures patients' reports on clinician behaviors deemed by patients as key to a high-quality hospitalization experience.

Objectives: We conducted a national study of hospitals that achieved the highest performance on HCAHPS to identify promising practices for improving patient-centeredness, common challenges met, and how those were addressed.

Research Design: We identified hospitals that achieved the top ranks or remarkable recent improvements on HCAHPS and surveyed key informants at these hospitals. Using quantitative and qualitative methods, we described the interventions used at these hospitals and developed an explanatory model for achieving patient-centeredness in hospital care.

Results: Fifty-two hospitals participated in this study. Hospitals used similar interventions that focused on improving responsiveness to patient needs, the discharge experience, and patient-clinician interactions. To improve responsiveness, hospitals used proactive nursing rounds (reported at 83% of hospitals) and executive/leader rounds (62%); for the discharge experience, multidisciplinary rounds (56%), postdischarge calls (54%), and discharge folders (52%) were utilized; for clinician-patient interactions, hospitals promoted specific desired behaviors (65%) and set behavioral standards (60%) for which employees were held accountable. Similar strategies were also used to achieve successful intervention implementation including HCAHPS data feedback, and employee and leader engagement and accountability.

Conclusions: High-performing hospitals used a set of patient-centered care processes that involved both leaders and clinicians in ensuring that patient needs and preferences are addressed.

Key Words: patient-centered care, patient experience, quality, hospital care, patient-centered outcomes, best practices

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Patient-centered care (PCC) is important in its own right and associated with improved clinical outcomes, improved patient satisfaction, and reduced costs.[1–7] The Institute of Medicine includes PCC as 1 of 6 quality improvement aims.[4] PCC is a multidimensional concept that involves meeting patient needs, values, and preferences; focusing on the whole person; providing emotional support; alleviating physical discomfort; communicating adequately; strengthening the patient-provider relationship; and, care coordination.[8–10] Hospitals are a challenging setting in which to deliver PCC due to the hectic acute care pace, and the complex and often changing health care teams.[11,12] Patients are often anxious and need physical and emotional support.[13–18]

Patient evaluation is the cornerstone for measuring patient-centeredness. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey measures patient reports on their hospital experience. HCAHPS was developed to provide consumers with information about care quality.[19–21] The survey is administered by authorized vendors to patients postdischarge and its results are posted at the Hospital Compare website. The survey measures clinician behaviors that are needed for patients to have a positive experience.[21] The behaviors are consistent with PCC dimensions and supported by theoretical and empirical evidence, in regards to their relation-

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ship with health care safety, quality, and improved outcomes[22] (see eTable 1, Supplemental Digital Content 1, http://links.lww.com/MLR/A970 for more details on HCAHPS items and domains). Higher performance on HCAHPS is associated with higher quality of care, and reductions in pressure ulcers and rehospitalizations.[23–26] HCAHPS performance measures are incorporated under the Centers for Medicare and Medicaid Services's Hospital Value-Based Purchasing rules into calculations of hospital quality-based reimbursement.[27]

HCAHPS scores have modestly increased since the start of public reporting[18] and reports from hospitals and professional organizations reflect increased efforts to make improvements in this area. Nevertheless, HCAHPS scores remain far below what patients desire. At half of US hospitals, at least a third of the patients report that they do not always get help from hospital staff as soon as needed.[28] In addition to the stress that this imposes on patients given their vulnerability and dependency on staff for meeting their personal needs,[29] delayed response to patient calls may have important safety implications. For example, about 50% of inpatient falls occur during attempts to reach the bathroom.[30,31] Furthermore, 14% of hospitalized patients report that they were not given information about what to do postdischarge,[32] which may place them at higher risk for adverse events. Twenty percent of patients suffer an adverse event within 3 weeks postdischarge.[33]

There is little evidence on how to successfully improve patient-centeredness of hospital care. Guidance to date has been largely based on case studies and expert opinion.[34–37] This paper presents the main findings of the Best Practices in Patient-centered Care Study. The study, funded by the Agency for Healthcare Research and Quality, aims to identify and disseminate promising practices in this area. We identified hospitals that met objective criteria for high performance on each HCAHPS domain and explored the interventions that these hospitals used to improve.

In this manuscript we sought to answer the following: (1) what are the hospitals with the best HCAHPS ratings in the United States doing to help improve their patients' experiences of care; and (2) what challenges have these organizations had and how they overcame them? We also present an explanatory model for how improvements in patient experience of care were achieved based on the study's empirical findings.

METHODS

Study Sample and Recruitment

To identify highly performing hospitals on each HCAHPS domain, we conducted an analysis of publicly reported HCAHPS data from the Hospital Compare database, using the December 2012 report (includes responses of patients discharged between April 2011 and March 2012).[38] The HCAHPS survey is well validated and includes domains for nurse communication (NC), doctor communication (DC), hospital staff responsiveness (SR), pain management (PM), communication about medications (CAM), and discharge information (DI)[19–21] (see eTable 1, Supplemental Digital Content 1, http://links.lww.com/MLR/A970). The domain scores are posted after case-mix adjustment for service line as well as for patients' age, sex, education level, health status, and primary language. We included all hospitals submitting at least 300 surveys for that reporting period. We defined high performance as achieving the highest ranks during that reporting period (called "top ranking") or making substantial recent improvements from the prior reporting period (called "most improved"). We used all 6 HCAHPS domains (NC, DC, SR, PM, DI, CAM). We did not include the HCAHPS single-item questions on cleanliness and noise as those did not measure specific clinician behaviors.

We classified hospitals based on bed count into 3 categories: small, medium, and large. Bed count data were retrieved from the American Hospital Association database in December 2011.[39] We categorized hospitals with up to 200 beds as small, those with 201 to 499 beds as medium sized, and those with 500 beds or more as large. We then identified hospitals with the top 10 scores on each of the 6 HCAHPS domains for each of the hospital size categories. Hospitals achieving those scores met the study criteria of being a "top ranking" (TR) hospital. We also identified any hospitals that had achieved an increase of 12 points over the prior reporting period on any of the 6 domains and those met the study criteria of "most improved" (MI). We selected a 12-point threshold based on an analysis of changes in HCAHPS domain scores overtime, showing that only a few hospitals nationally made that level of improvement within 1 reporting period, indicating their higher performance compared with the vast majority of other hospitals.

For all hospitals that met the study's high performance criteria, we sent a letter to the hospital's Chief Executive Officer (CEO) congratulating him/her on their hospital's success and inviting them to participate in this study. We encouraged each CEO to identify their hospital's key informants (eg, quality, service excellence, nursing, and medical directors) who could provide information on what their hospital did to improve. We then e-mailed the key informants asking for their consent to enroll in the study and respond to an anonymous online survey.

Data Collection

The online survey contained 3 open-ended questions and a set of 12 binary response questions. We e-mailed the survey link and 3 follow-up reminders to the key informants. The open-ended questions asked key informants what they "think has helped their hospital achieve a high performer status," inquired about specific examples of used interventions, the challenges met and how they were addressed, and any processes, policies, or procedures in place to help ensure that all patients have an excellent hospital experience. The binary response questions included a listing of potential strategies (Fig. 2) for respondents to indicate whether they used in their hospital. The list was based on published medical literature,[34,40–47] and improvement experts' input.

Data Analysis

To describe the study sample, we summarized enrolled hospitals characteristics and compared their HCAHPS performance during the study selection period (December 2012

report) to that reported in the December 2009 public report, which is the earliest period for which Hospital Compare HCAHPS data was available for the majority of the enrolled hospitals.

Using online survey responses, we calculated the percentage of hospitals using each of the 12 improvement strategies. The status of each hospital in regards to using a particular strategy was determined based on the response of the majority of the key informants within that hospital. In the case of an equal number of "yes" and "no" responses on use of a particular strategy, the hospital's status for that item was considered "undetermined" and that hospital was removed from the numerator and denominator calculation of the percentage of hospitals using that strategy. We used Microsoft Excel 2010 to summarize this data.

We conducted qualitative data analysis on open-ended survey responses using the grounded theory approach. Two investigators conducted a preliminary read-through of survey responses and created an initial list of codes (themes). A coding team consisting of a senior investigator and 3 team members with graduate degrees in a health care-related field coded the data. At least 2 coders coded each response. The coding team held weekly meetings over a period of 6 months to clarify code definitions, refine the coding list, and discuss any disagreements. We used NVivo 10 software by QSR International to code the survey responses. The number of mentions for each of the themes was rolled up to a hospital level so that the mention of a theme by one or more key informants at a hospital was counted only once for that hospital.

Approval for this study was obtained from the Johns Hopkins Medicine Institutional Review Board.

RESULTS

Out of 2928 hospitals in the publicly available December 2012 HCAHPS report, 169 hospitals met the study high performance criteria for at least 1 HCAHPS domain (150 TR and 19 MI). A letter was sent to the CEOs of all these hospitals except for 1 whose contact information could not be located. Fifty-three hospital CEOs (30% of eligible hospitals) responded agreeing to participate and providing the contact information of their key informants. One hundred and thirty-eight key informants from 52 of the 53 hospitals (42 TR and 10 MI) responded to the invitation to participate and submitted online survey responses.

Table 1 summarizes enrolled hospitals' distribution by bed size, geographic location, teaching status, and the HCAHPS domain in which they achieved high performance. Enrolled hospitals were evenly distributed in size and teaching status. About 40% of these hospitals were high performing in more than 1 HCAHPS domain (2 hospitals on all 6 domains; 5 on 5 domains; 3 on 4 domains; 3 on 3 domains; 7 on 2 domains). The enrolled hospitals were similar in size to the nonenrolled hospitals. (Percentages of small, medium, and large-size hospitals were 37%, 31%, and 33%, respectively, in the enrolled hospitals sample compared with 31%, 31%, and 38%, respectively, among the nonenrolled hospitals; χ^2 statistic = 1.01, $P = 0.60$.) Hospital were located across 26 states within all 4 US regions as defined by the Census Bureau.

To display enrolled hospitals' HCAHPS improvement overtime, Figure 1 depicts a scatterplot of hospitals' domain scores in 2012 versus 2009, by high performance criteria. All points above the diagonal line represent improvements in HCAHPS scores. The majority of enrolled hospitals (both TR and MI) are above the diagonal line on all of the domain scores indicating overall improvements in all the HCAHPS domains. Increases in domain scores were statistically significant for all the domains ($P < 0.0001$). The mean increase in domain scores and corresponding 95% confidence intervals for each were: NC (4.67, 3.79 to 5.55); DC (1.77, 1.05 to 2.49); SR (5.13, 3.90 to 6.38); PM (3.44, 2.37 to 4.51); CAM (4.75, 3.54 to 5.96); DI (3.77, 3.02 to 4.52).

Figure 2 depicts the frequency of use of select improvement strategies by high-performing hospitals. Hospitals used multiple and similar concurrent strategies to improve the patient experience. Nearly all hospitals used patient experience data feedback, HCAHPS goal setting, hospital-wide and unit-based interventions, and regular nursing rounds. Fewer hospitals offered financial or recognition incentives for high performance (58%), developed new hiring policies (52%), and involved external consultants (39%).

Qualitative analysis of responses to the survey's open-ended questions identified themes around organizational context and culture, patient-level interventions to improve care processes, as well as system-level strategies to facilitate the improvement efforts. Table 2 depicts the identified themes; the number of hospitals whose key informants mentioned that theme among all, TR, and MI hospitals; and a representative quote for each theme.

TABLE 1. Enrolled Hospitals Characteristics

Hospital Characteristics	No. Hospitals (%) (n = 52)
Size	
Large (≥ 500 beds)	17 (33)
Medium (201–499 beds)	16 (31)
Small (≤200 beds)	19 (37)
Teaching status	
Teaching	23 (44)
Nonteaching	28 (54)
High performance criteria	
Top ranking	42 (81)
Most improved	10 (19)
High performance domain on HCAHPS	
Communication about medications	16 (31)
Physician communications	15 (29)
Discharge instructions	23 (44)
Nurse communications	16 (31)
Pain management	17 (33)
Staff responsiveness	19 (37)
Geographic location*	
Northeast	12 (23)
Midwest	19 (37)
South	17 (33)
West	4 (8)

*Geographic regions defined based on the US Census Bureau Regions of the United States.

HCAHPS indicates Hospital Consumer Assessment of Healthcare Providers and Systems.

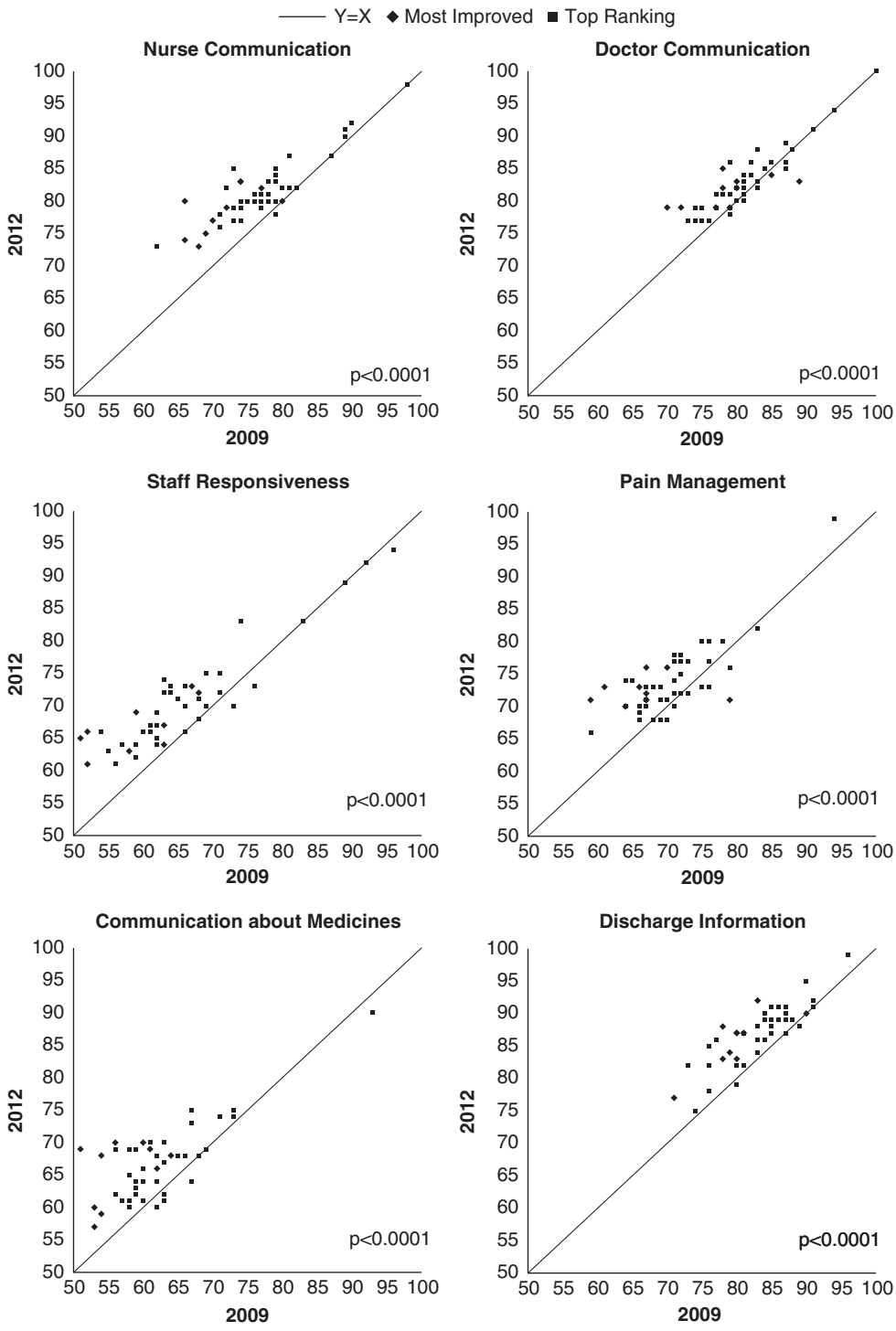

FIGURE 1. Enrolled hospitals' HCAHPS scores for 2012 report versus 2009, by high performance criteria. Two-tailed paired *t*-tests were used to calculate *P*-values.

Organizational Context and Culture

Organizational context and culture emerged as a common theme with commitment to the patient and family experience mentioned by key informants at 40 of 52 hospitals as a key contributor to their high performance. Each patient experience is valued in its own right with a focus on a compassionate and personalized approach to care delivery:

We all need to provide the "care that we would want for our mother." Every employee in the organization can state this

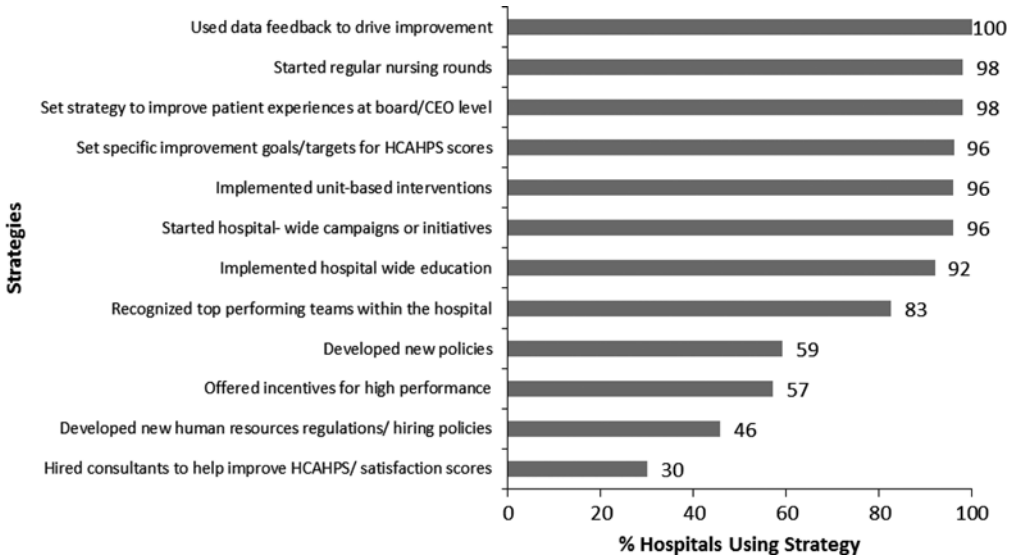

FIGURE 2. Select strategies utilized to improve patients' hospital experiences.

goal since it is easy to understand and they can relate to it (TR hospital in NC, DC, PM, and SR).

Attention to every single patient is demanded as part of the hospital's commitment:

All staff are engaged. We believe in "Every Patient. Every Time." That means hospital leaders expect every patient will have a positive experience every time one of our employees interacts with them. We encourage staff to ask for help if they are having difficulty helping our patients (TR hospital in DI).

Encouraging staff to come forth with any concerns, needs, or improvement ideas was reported from 19 hospitals as part of an "employee-oriented culture" where the "culture of caring, compassion and respect extends not only to our patients, but our staff members as well."

Patient-level Interventions

Patient-level interventions focused on improving responsiveness to patient needs, the discharge experience, and patient-clinician interactions. eTable 2, Supplemental Digital Content 2, http://links.lww.com/MLR/A971 provides description of the patient-level interventions, implementation challenges, and how those challenges were addressed.

To improve responsiveness to patient needs, hospitals used proactive nurse rounds and executive/leader rounds (reported at 83% and 62% of hospitals, respectively). Proactive nurse rounding involves having a nurse "check-in" on each patient regularly, asking standard questions to surface patient needs and address those. Executive/leader rounding involves having an executive/leader devote time to directly interact with patients and hospital staff. These rounds are intended to surface any concerns that patients or staff may have and working to address those. Proactive nursing and leader rounds were frequently reported within the same hospitals and were commonly used in a complementary manner.

To improve the discharge experience, multidisciplinary rounds, postdischarge calls, and discharge folders were reported by key informants at 56%, 54%, and 52% of hospitals, respectively (see eTable 2, Supplemental Digital Content 2, http://links.lww.com/MLR/A971 for more description).

To improve clinician-patient interactions, hospitals promoted specific desired behaviors that reflected a friendly demeanor, caring attitude, and patient-centered communication approach. Examples of promoted behaviors include: "Smile and make eye contact," "greet each patient and visitor," introduce oneself, provide information, answer questions, "explain what you are going to do," "provide reassurance," and offer a "blameless apology." Attention was also given to body language and nonverbal cues such as "sitting down at the bedside" and "making eye contact."

Desired behaviors were commonly promoted using a variety of acronyms, as well as by use of standard questions such as "is there anything else we can do for you right now?" Sixty percent of the hospitals set desired behaviors as standards, and held employees accountable for following them.

System-level Strategies

Key informants reported system-level efforts to engage and educate employees and leaders about the behaviors needed to ensure positive patient experiences.

Hospital leaders monitored and audited desired behaviors to hold employees accountable and ensure consistency in practice:

Our primary method of validating excellent care is with daily nurse leader rounds on all patients. Nurses refer to a "We Promise" poster in each patient room and ask the patient if we are keeping all of our promises. In addition, the nurse leader checks the Care Board to make sure it is up-to-date (MI hospital in PM, CAM, and DI).

TABLE 2. Major Themes of Key Informant Reports From 52 High-performing United States Hospitals on How They Achieved High HCAHPS Performance

Theme	Hospitals Reporting Theme [n (%)] All	Top Ranking	Recently Most Improved	Representative Quote
Organizational context and culture				
Commitment to patient and family experience	40 (77)	33 (79)	7 (70)	The goal of the __ staff is exceeding, not just meeting the expectations of the patient and family related to all aspects of care
Commitment to quality improvement and safety	25 (48)	21 (50)	4 (40)	Instilling an understanding that an exceptional patient experience … is more about quality and safety than it is about "satisfaction"
Mission, vision, and values	23 (44)	19 (45)	4 (40)	Changing our Mission Statement and Establishing a Written Commitment to Excellence
Commitment to employees	19 (37)	16 (38)	3 (30)	We care for our employees as much as we care for our patients and our community
Patient-level interventions				
Responsiveness to patient needs				
Proactive nurse rounding	43 (83)	33 (79)	10 (100)	… implemented Hourly Rounds that are conducted by Nurses … use a process that addresses "four P's"—Presence, Positioning, Pain and Personal Hygiene
Executive/leader rounding	32 (62)	25 (60)	7 (70)	Senior leaders visit all patients each week and identify process breakdowns to be addressed. These issues are taken to management council and reviewed …
Discharge preparation and planning				
Multidisciplinary rounding	29 (56)	23 (55)	6 (60)	Interdisciplinary rounds are utilized to … formulate the best discharge plan for the patient and … ensure that the patient and family are in agreement with that plan
Postdischarge call	28 (54)	21 (50)	7 (70)	After discharge from the hospital, each patient receives a postdischarge telephone call from a Registered Nurse to assess their progress and to answer any questions …
Discharge folder or plan	27 (52)	21 (50)	6 (60)	… discharge folder given to patient upon admission … has a short checklist … and is addressed by each nurse taking care of the patient. The checklist states "What I need to know when I get home" and "discussed"; Help I will need, …
Patient-clinician interactions and communications				
Promoting desired behaviors using acronyms and slogans	34 (65)	27 (64)	7 (70)	E3 (Engage Every Employee): Instant Introductions, Commit to Sit, Consistent Communication AIDET (Acknowledge, Introduction, Duration, Explanation, and Thank you)
Setting behavioral performance standards for patient-centeredness and excellent service	31 (60)	25 (60)	6 (60)	Education on patient-centered care begins at Employee Orientation, with a focus on __ Hospital's 10 Service Behaviors. These behaviors are also part of every employee's performance evaluation and account for 35% of their merit increase
Strategies to enhance patient education	22 (42)	18 (43)	4 (40)	The staff use teach back methods to assure that patients and families are truly understanding the information/education being delivered
Communication boards in patient rooms	19 (37)	14 (33)	5 (50)	Use of the "White Board" to keep the patient and family informed of the plan of care including tentative discharge date and time of major interventions Bedside Dry Erase Communication Board [with] team names, pain goal/ timing, VS, personal preferences, family contact number
Bedside shift report	15 (29)	12 (29)	3 (30)	At shift change, the "outgoing" and "incoming" nurses meet at the patient's bedside, follow a standard script to communicate plan of care, priorities, …
Sharing daily plan with patients	6 (12)	4 (10)	2 (20)	Follow a standard script to communicate plan of care … and involve the patient
Using patient experience survey data				
Goal setting	31 (60)	22 (52)	9 (90)	HCAHPS goals are set at facility, department and personal levels all of which impact merit raises and incentive pay for leadership
Data feedback frequency:				
Monthly	28 (54)	19 (45)	9 (90)	HCAHPS/patient satisfaction data is provided … monthly to all staff by Communication Boards and staff meetings
Weekly	20 (38)	14 (33)	6 (60)	
Daily	6 (12)	4 (10)	2 (20)	

(*Continued*)

TABLE 2. Major Themes of Key Informant Reports From 52 High-performing United States Hospitals on How They Achieved High HCAHPS Performance (*continued*)

Theme	Hospitals Reporting Theme [n (%)] All	Top Ranking	Recently Most Improved	Representative Quote
Data feedback level				
Local	35 (67)	28 (67)	7 (70)	We report the findings to the staff monthly and also share day to day comments from the patients from our patient call center. Each unit identifies where they can make improvements each month …
Departmental	31 (60)	23 (55)	8 (80)	
Institutional	27 (52)	19 (45)	8 (80)	
Work standards and processes				
Multidisciplinary teamwork	36 (69)	27 (64)	9 (90)	Nursing/physician collegiality is promoted by regular attendance of each discipline at each other's monthly meetings
Monitoring (auditing)	22 (42)	19 (45)	3 (30)	Nurse managers conduct daily patient rounds [to verify whiteboards and bedside report and regular (hourly nursing) staff rounds]
Policy	21 (40)	16 (38)	5 (50)	Developed new human resources regulations/hiring policies … tools used in this program have proven effective in identifying candidates who best fit the positions
Coordination of care	19 (37)	15 (36)	4 (40)	… meeting on a biweekly basis which includes administration, hospital doctors, nursing supervisors, respiratory therapists, cath laboratory staff, laboratory staff, pharmacy director, case management, community outreach coordinator
Implementation consistency	17 (33)	14 (33)	3 (30)	We emphasize how important consistency is from each caregiver to the next, so that patients/families can answer "always" and "excellent"
Organizational approach to communications	17 (33)	11 (26)	6 (60)	Focus, focus, and more focus and consistent messages from leadership at all levels is always ongoing
Leaders				
Leadership engagement	43 (83)	33 (79)	10 (100)	HCAHPS scores are … monitored by members of the board …monthly …educational sessions to help them better understand the hospitals processes …
Leadership accountability	26 (50)	20 (48)	6 (60)	Each department manager is required to complete an action plan …when scores have trending of not reaching facility goals
Leadership structure	19 (37)	17 (40)	2 (20)	We have an __ Committee (VP Clinical Operations, VP Human Resources, VP Community Benefit, VP Communications, CMO, … Director of Patient Engagement, Chief Nursing Officer, …VP Finance, …) that oversees our efforts
Leadership rounding on employees	16 (31)	12 (29)	4 (40)	Employee rounding … allows staff to bring concerns and solution to their manager on a monthly basis
Leadership development	12 (23)	8 (19)	4 (40)	The Leadership Development Team was established to focus on how to continuously develop our leaders …Sessions are held quarterly … competencies have also been developed and are a part of each leader's annual evaluation
Employees				
Employee accountability	44 (85)	35 (83)	9 (90)	Job criteria and corresponding performance appraisals include Error Prevention and Service Standards of Performance that equate to 40% of the final rating
Employee training and development	40 (77)	32 (76)	8 (80)	Over 40 employees, representing various departments throughout the hospital, were taken off site for 1 week and immersed in concepts about the patient experience, so that the concepts and ideas could be taken back …
Employee engagement	37 (71)	30 (71)	7 (70)	… direct engagement of physicians in improving doctor-patient communications, patient satisfaction, and quality of care … through the creation of _ task force
Strategies to enable employee	15 (29)	12 (29)	3 (30)	Music on the Hour prompts hourly rounds, … charge nurse rounds, …

Leaders used strategies to enable employees to perform highly, such as "music on the hour" as a reminder for proactive nurse rounds, rounding on employees "to remove any barriers preventing best practice," and the "administration keeping an open door policy".

Patient experience data were extensively used for feedback and leaders were held accountable for improvement of their team's performance:

HCAHPS/patient satisfaction data is provided weekly to patient care unit leaders and administration, and monthly to all staff via Communication Boards and staff meetings. Physician-driven HCAHPS data is provided at each physician department meeting, and high performers are recognized at the quarterly staff meeting. We provide both hospital level data and unit-specific data (when available) to all units/departments (MI hospital in PM, CAM, and DI).

All the patient-level interventions and system-level strategies were reported at both the TR and MI hospitals. Themes on leadership engagement and accountability and data sharing were more frequently mentioned among the MI hospitals, however, these differences were not statistically significant.

The most commonly reported challenge to improvement was consistency in practice. Change management was another major challenge. The themes on main challenges and how they were addressed are detailed in eTable 3 (**S**upplemental Digital Content 3, http://links.lww.com/MLR/A972).

DISCUSSION

In this study, we identified the interventions and strategies that key informants at high-performing US hospitals believed led to their success in improving the patient experience. The informants described using a set of patient-level interventions to ensure that patient needs and preferences are surfaced and addressed in a timely manner while in the hospital and postdischarge. These interventions focused on both the technical and interpersonal processes of care, and addressed multiple areas that are essential to patient-centeredness such as meeting patient needs, alleviating physical discomfort, and communicating adequately.[8–10] The interventions increased the frequency of encounters between patients and their health care team (eg, by hourly nurse rounds, multidisciplinary team rounds, postdischarge calls), clarified the expected tasks during these encounters (eg, assessing pain at every nurse round, addressing patient postdischarge needs during multidisciplinary rounds), and focused on promoting specific clinician behaviors (eg, sitting down, explaining what will be happening), allowing the encounters to have a positive impact on the care of every hospitalized patient.

The efforts to improve patients' experiences were described as closely tied to the hospital's mission and commitment to patients, families, employees, and delivering safe and high-quality care. These efforts were intense and persistent, and involved both leaders and employees. Declaring goals, disciplined and diligent execution, and defined accountability characterized the high-performing hospitals. Similar approaches have proved successful in other areas of improvement work.[47]

The main reported challenges included consistency in behaviors, change management, and clinician engagement. Similar adaptive challenges have been reported in other improvement work. Training in leading adaptive change and using a framework to reliably improve performance might help facilitate hospitals' efforts to overcome such challenges.[48,49]

On the basis of the study's empirical findings, we propose an explanatory model to describe how improvements in the patient experience were achieved. The model, depicted in Figure 3, adapts the Donobedian framework[50] displaying the relationship between the hospital's structure (environment, leaders, employees), patient-centered processes for care, and the outcome of improved patient experience.

A favorable organizational context with a supportive structure was cited by key informants as important ingredient for success. Activities to engage and develop employees' and leaders' skills were frequently reported in relationship to

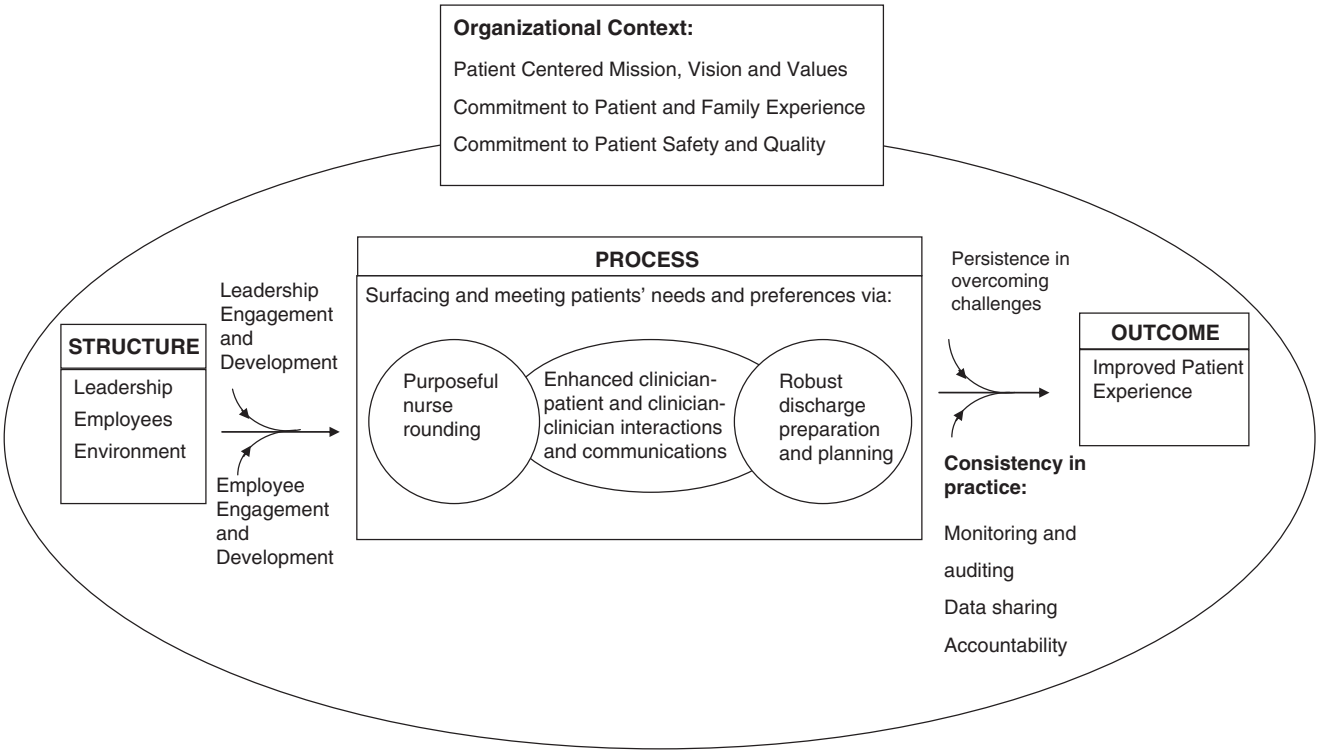

FIGURE 3. Explanatory model for how positive patient experiences were achieved at the high-performing hospitals.

successful implementation of new patient care processes. The latter center around proactive nurse rounding, enhanced patient-clinician interactions and communication, and robust patient preparation for discharge. These processes need to focus on the technical and interpersonal aspects of care as both are interconnected and integral to achieving patient-centeredness. For example, while providing treatment for pain is a technical task within the nurse rounding process, maintaining a caring and empathic attitude, and communicating with the patient about treatment options and possible side effects relate to the interpersonal aspects of care. Both are essential for the proactive nurse rounding process to improve the patient experience. To achieve consistency in practice and meet improvement goals, key informants reported using monitoring and auditing approaches, patient experience data feedback, and employee and leader accountability. This model closely aligns with a conceptual framework to achieving improvement that was successfully applied to improve performance on core processes of care across the Johns Hopkins Health System. The latter included the following: (1) declare and communicate goals; (2) create an enabling infrastructure; (3) engage clinicians and connect them in peer learning communities; (4) report transparently and create accountability system.[49]

To our knowledge this is the first national study using clearly defined criteria to identify the health care innovations and practices put into place to improve patients' experiences of hospital care. This study provides the baseline understanding needed for larger quantitative follow-up studies. The proposed explanatory model presents a starting point for understanding and organizing the promising practices for improving the patient experience in the hospital. Future studies can aim to better understand these proposed pathways, develop and implement well-designed and focused interventions, and evaluate their impact on patient experience and outcomes.

This study has some limitations. First, due to the multifaceted nature of used interventions and the lack of a control group, we cannot make statements on specific practices' effectiveness. Future studies can evaluate these practices, eventually setting benchmarks for best practices. Second, due to the small sample size we cannot identify differences in the frequency of used strategies between TR and MI, or per high performance domain. Lastly, about a third of high-performing US hospitals participated in this study and these hospitals may not fully represent the range of interventions used nationally to improve the patient experience.

In conclusion, the vast majority of high-performing hospitals used multilevel strategies and interventions to ensure that their patients receive high-quality hospital services that are sensitive to their individual needs and preferences. Some of the interventions required significant behavior and work process changes from hospital staff. The most commonly reported challenge to achieving success was consistency in practice.

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