

# WORKING P A P E R

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## Improving Hospital Inpatient Nursing Care

### A Case Study of One Hospital's Intervention to Improve the Patient's Care Experience

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## ACRONYMS

AHRQ	Agency for Healthcare Research and Quality
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CEO	Chief Executive Officer
CMS	Centers for Medicare and Medicaid Services
CT	Computed tomography or computed axial tomography (CT or CAT scan)
DHHS	Department of Health and Human Services
JACHO	Joint Commission on Accreditation of Healthcare Organizations
MRI	Magnetic resonance imaging
NRC	National Research Corporation
PHS	Picker Hospital Survey
PI	Performance improvement
QI	Quality improvement
RN	Registered nurse

# THE CASE STUDY IN BRIEF

## INTRODUCTION

This report tells the story of one large urban hospital that used an iterative, six-step quality improvement (QI) process to successfully change the way its registered nurses, nursing assistants, and other nursing staff provided emotional support to the hospital's adult, medical and surgical inpatients.

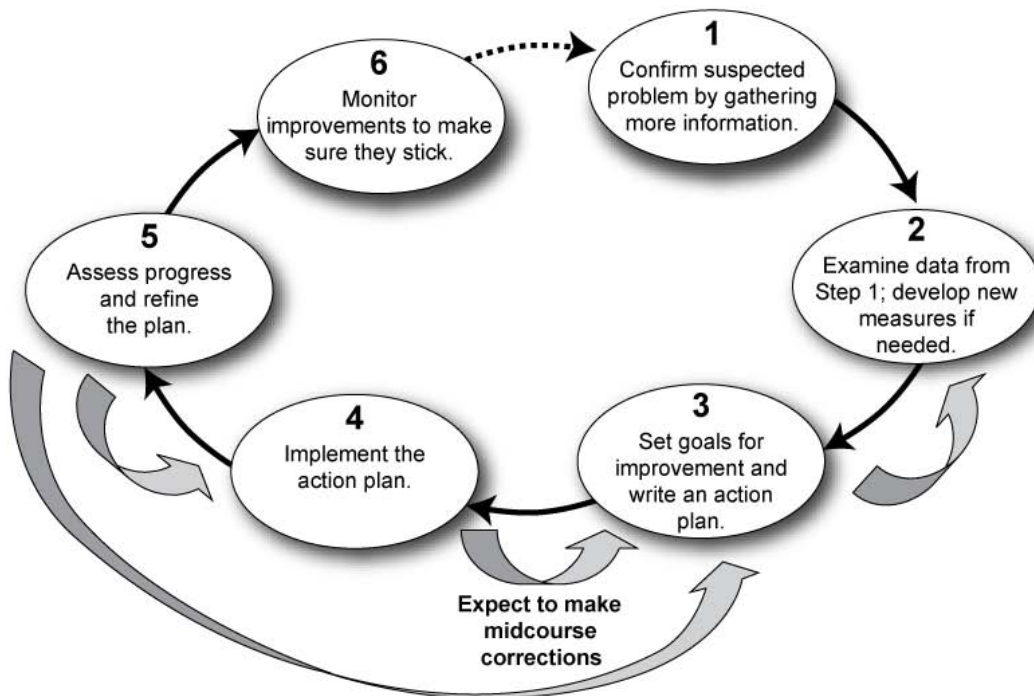
The 2003 and 2004 customer experience ratings that patients provided about the care they received as inpatients in the hospital--first collected through the National Research Corporation's Picker Hospital Survey (PHS) and later by the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey--indicated that emotional support needed to be improved. Those findings were confirmed by patient complaint data, monthly reports collected from patients through a series of short questions about their interactions with doctors and nurses, and suggestion boxes at each nursing unit's desk. The "U.S. News and World Report" annual report on hospitals also indicated a need for improvement. Collecting and evaluating these data and confirming the problem comprised the first step in the hospital's approach to QI.

The six steps in the hospital's QI process, illustrated in Figure 1, are based on the well-established Plan-Do-Study-Act (PDSA) cycle.<sup>1</sup> Note that the closed loop of arrows through the six steps and back again to the first step highlights the iterative nature of quality improvement activities. For this particular quality improvement effort, the case study hospital went through the cycle twice until it developed a mix of intervention strategies that produced the desired results.

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<sup>1</sup> To learn more about the PDSA approach see the Institute for Healthcare Improvement's public website at [www.IHI.org](http://www.IHI.org) (formerly [www.QualityHealthCare.org](http://www.QualityHealthCare.org)).

**Figure 1. Six steps to ongoing quality improvement**



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This report describes the hospital's six QI steps, the results of its improvement activities, and the lessons it learned that may be helpful to others. This introduction is followed by:

- A one-page look at the facts
- Short descriptions of each of the six steps
- More complete background information
- More detailed descriptions of the six steps
- Summary of lessons learned
- A look at what followed for the case study hospital

## **THE SHORT STORY**

### **Who?**

A large, acute-care, academic hospital with more than 600 beds, 1,000 physicians, and 2,000 nurses, therapists, technologists, and support personnel, serving more than 300,000 people from its surrounding urban area, the United States, and the world.

### **What?**

The hospital implemented a successful quality improvement (QI) intervention to improve the emotional support offered by its registered nurses, nursing assistants, and other nursing staff to adult medical and surgical inpatients.

### **Why?**

Data indicated that the hospital's nurses were not offering optimal emotional support to patients and thus were missing an opportunity to provide the best care, boost the patient experience, and ensure the hospital's competitiveness with similar hospitals. The data came from the Picker Hospital Survey (PHS), the hospital's own QI survey, hospital records of patient complaints, and the "U.S. News and World Report" annual hospital rankings.

### **When?**

A QI initiative began early in 2004 and developed into an action plan with a full set of targeted activities by the end of 2004. The first performance goals were reached in late 2005, and QI was ongoing. Sustained improvements were reached by the middle of 2006.

### **How?**

A hospital QI team used a six-step Plan-Do-Study-Act process to identify the areas that needed improvement and implement a multi-faceted strategy for improving the emotional support offered to patients. This strategy included actions for each of three sets of interventions: strengthen focus on patient service, improve communication with patients, and provide support to staff.

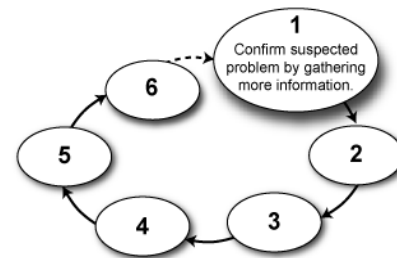
### **So What?**

The emotional support offered to patients improved steadily, and the hospital reached its goal of improving the patient experience of care. As a result, the hospital's reputation in the community improved, market share was maintained, nursing staff morale improved, and nursing turnover and absenteeism declined. This QI process yielded valuable lessons applicable to QI efforts more broadly: use all available data to identify specific problems, trends, causes, and actions for improvement; align action plans with problem areas and improvement goals; think system-wide; be open to potential need for changes in organization, staffing and processes; maintain leadership support, accountability, and presence; communicate with and train management and staff; monitor and refine the intervention during implementation; continuously monitor indicators such as CAHPS and other data to make sure improvements stick; and celebrate successes.

## THE SIX STEPS TO QUALITY IMPROVEMENT

### Step 1: Confirm the Suspected Problem by Gathering More Information

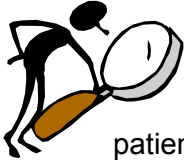
#### *What Did the Hospital Do?*



Hospital leaders knew, based on comparisons of the hospital's performance with that of similar hospitals, that the hospital scored very well on the technical quality of medical care it provided but that it had a problem on measures related to the emotional support provided to adult medical and surgical inpatients. To preserve market share and the average daily census, the hospital knew that it needed to gain more respect from patients. To confirm the suspected problem, the hospital:

- Compared its performance not only with that of other hospitals, but, when data in the Patient Evaluation of Performance project (see page 22) was expanded, compared its performance with that of other *academic* hospitals, like itself.
- Designed and administered a proprietary patient survey that focused on specific doctor-to-patient and nurse-to-patient emotional support and communication behaviors such as whether or not providers introduce themselves to patients or ask how they can help the patient. Hospital leadership was particularly interested in patients' write-in suggestions for additional hospital improvement.
- Conducted informal discussions during staff meetings to learn more about *why* providing emotional support to patients was challenging for staff.
- Identified specific areas where it should focus improvements.
- In the first iteration of this step, selected the following measures to track and examine more closely.
  - Quarterly trends for patient experience measures from the Picker Hospital Survey (PHS). The patient experience measures include: overall rating of hospital care received; responses to whether the patient would recommend the hospital to family and friends; and the following emotional support survey items (composite score on all six items and scores on each item individually):
    - Doctor discussed with patient the patient's anxieties and fears
    - Confidence and trust in doctor
    - Nurse discussed with patient the patient's anxieties and fears
    - Confidence and trust in nurses
    - Ease of finding someone to talk to
    - Help in understanding the hospital bill
  - Findings from its own monthly QI survey of doctor-patient interactions.
  - Patient complaint data collected from open-ended questions on patient surveys and the suggestion boxes at nursing unit desks.





### ***What Did the Hospital Find Out?***

The hospital realized that it needed to collect patient experience data through multiple sources and methods in order to understand how its own patients view the care experience and to compare its performance to that of other hospitals through benchmarking.

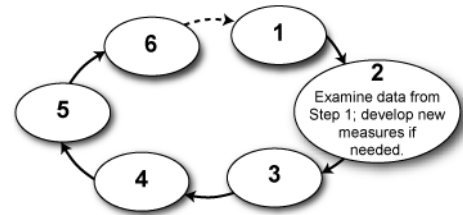
The choice to administer the CAHPS Hospital survey and the timing of the survey were driven by the hospital's expectation that the federal Centers for Medicare & Medical Services was about to establish a policy mandating that hospitals use the CAHPS Hospital survey. Such a policy would have had cost implications in that the hospital had to decide whether to combine the PHS it was already using with the hospital CAHPS survey or administer the two surveys separately. The hospital chose to administer one survey, integrating the CAHPS Hospital Survey with the Picker Hospital Survey. Survey items (questions) were selected for inclusion in the new survey based on the ability to trend the items over time and whether or not information about certain QI measures was available internally.

### ***Take-Away Lessons***



- Participate in established measurement opportunities such as the statewide Patient Evaluation of Performance project that used the Picker Hospital Survey. These initiatives allow a hospital to compare its patient experience data with those of other hospitals.
- Collect survey data regularly and over time in order to evaluate performance and the effect of QI efforts. For this hospital, the Picker Hospital Survey in particular provided years of important data.
- Gather additional information from other sources to supplement the survey data; e.g., use in-house measurement tools, analyze patient complaint records, and maintain ongoing informal communication with staff. Interview staff individually and in groups.

## Step 2: Examine Data Gathered in Step 1; Develop New Measures if Needed



### *What Did the Hospital Do?*

- Used the PHS data to establish performance baselines in several patient experience areas--emotional support, coordination of care, continuity of care, transition from hospital to home, and involvement of family and friends--to identify areas that needed improvement and to select an area on which to focus improvements.
- Studied data gathered from patient complaint records.
- Decided to focus on improving emotional support as a priority issue.
- Conducted separate focus groups with nursing staff and with patients to develop qualitative information on their experiences and concerns. Used the information to guide development of the strategy and actions for improving emotional support.
- In the second iteration of this step, continued to track and examine the same patient experience data but also set up internal data-collection processes to regularly measure the desired performance on measures from its QI survey and from patient complaints.



### *What Were the Results?*

When hospital leadership and QI staff looked closer at the survey data and especially at comparative data with other hospitals, they found that the hospital scored low on several dimensions of patient experience, particularly in the areas of continuity of care, transition from hospital to home, and emotional support of patients. In deciding among these low areas of performance and the many variables on the PHS survey, the hospital leadership chose a QI initiative focused on emotional support because of the high correlations of the 'emotional support provided by nurses to patients' to both the 'overall rating' of the hospital by patients and to whether a patient 'would recommend the hospital to family or friends'.

Moreover, staff interviews revealed anecdotally some of the challenges to improving emotional support:

- Some of the nursing staff seemed to have a sense of entitlement, according to nursing department leadership. They behaved as though they had unlimited job security (because of the strength of the nursing unions) and discretion as to how well they supported patients' non-clinical needs, such as the need for emotional support, because the clinical needs of the patient population were so great and staff were busy.
- Some nursing staff believed that offering emotional support was an intrusion and bother to patients.

- It was not always clear to nursing unit directors (the head nurses in charge of units within the hospital) when staff should be terminated for poor performance. Some directors expressed a reluctance to take action because nursing staff were unionized and the directors were concerned that any disciplinary action or termination would be challenged by the employee and/or the union. However, unit directors felt that staff changes were necessary in order to make significant quality improvements.
- Nurses have a heavy workload both because of the high number of patients and the patients' needs for acute care.

This additional interview information gathered by the hospital QI staff confirmed the hospital's belief that improvements should focus on the emotional support offered to patients by nurses rather than doctor-patient communication, nursing staff workload, or how nurses view their roles and interactions with patients.

The Picker Hospital Survey measures of emotional support selected during the first iteration of the Plan-Do-Study-Act cycle did not improve during the first quarter of 2004 when the hospital began to plan and implement the first steps of its emotional support intervention. The hospital's performance on emotional support measures declined during the last two quarters of 2004 as the hospital collected data from its own QI survey and from patient complaints. In November 2004, the hospital refined its action plan for improving emotional support; the hospital QI team went back to the drawing board and reexamined the data to discover how it might intervene in ways that would produce results. The details of the hospital's initial and refined action plans are discussed as part of the next step.

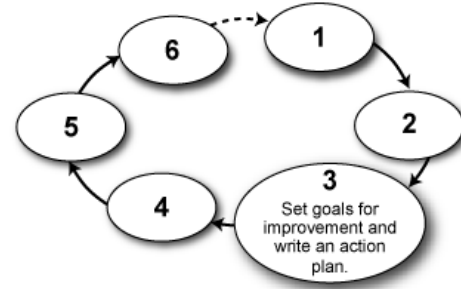
No additional measures were decided upon, given that the hospital was already collecting patient complaint data and comments. However, the hospital did improve its processes for collecting data from its QI survey so that the collection process was standardized, anonymous, and more reliable by increasing the patient sample sizes.

### ***Take-Away Lessons***



- Gathering and examining patient experience data is an iterative process.
- To establish an effective improvement strategy, it is essential to gather data that provide a full picture of which specific processes need to be improved and that can be used by implementers to assess how well selected QI interventions achieve the intended improvements.
- In deciding on which initiative to pursue, focus on how you compare to others by using benchmark comparisons and on what is important to the patient by using key drivers of overall patient experience

- **Step 3: Set Goals for Improvement and Write an Action Plan**



***What Did the Hospital Do?***

- Based on analysis of the 2003 and 2004 patient experience data described in Step 2, identified areas in need of improvement and confirmed the need to focus on emotional support.
- Set performance targets for the chosen measures based on the performance of similar hospitals.
- Designed interventions to improve emotional support by increasing the accountability of nursing staff and doctors.
- Wrote a formal action plan with specific activities organized into three main strategies.
  1. Strengthen the focus on patient service and specifically on the emotional support offered to patients by nurses.
    - Develop new evidence-based general care guidelines for nurse-patient interactions, vetting each of the guidelines with an expert nurse panel.
    - Revise job descriptions and performance evaluations for all nursing staff to include the new general care guidelines and highlight emotional support.
    - Establish a stronger role and responsibilities for the “charge nurse,” a new managerial position on all shifts. The charge nurse does not have patient responsibilities but focuses on problem solving and ensuring continuity between shifts.
    - Expand the “care extender” program by using volunteer medical students to help answer call lights and to triage requests.
    - Require individual hospital executives periodically to conduct “rounds;” i.e., to walk around the patient units to meet staff, model standards of care, increase staff accountability, and gain first-hand knowledge of the hospital’s front-line operations.
    - Develop a documentation-and-tracking process for the observations executives make during their rounds with a specific focus on necessary improvement actions.
    - Continue to work on increasing staff accountability for service behaviors.

## 2. Improve communication with patients.

- To increase awareness of and accountability for new priorities, include on the first page of the daily electronic medical record forms that nursing staff fill out when they are charting at the end of their shift a question as to whether they spent at least five minutes a day talking with each patient.
- Provide new uniforms for the nursing staff who are not registered nurses to differentiate them and give patients a better understanding of who the staff are and what services they provide.
- Continue to develop patient-information brochures for each hospital unit.
- Review and act on patient comments from the PHS, the hospital's own QI survey, and the patient complaint files.

## 3. Provide support to staff

- Train charge nurses for their new leadership roles in two groups to build rapport among them – one group hired from within and one group hired externally
- Coach nursing unit directors to improve their skills in the area of emotional intelligence and to help them deal with problems more efficiently.
- Train nursing staff on their roles and responsibilities, ethical issues, managing crises and life-threatening situations, and dealing with difficult patients and families.
- Increase accountability on service behaviors by tracking and internally reporting individual-level doctor and nursing unit scores on the hospital's own monthly survey and by tracking annual service goals by nursing unit.

### ***What Were the Results?***



The leadership of the nursing staff embraced the need to improve the emotional support provided to patients and they supported the specific actions and overall strategy. The new charge nurse position was also welcomed by the nursing staff because they saw it as a mechanism for bringing more continuity between the day and night shifts and for encouraging each nurse to address patient issues before the end of his or her shift. The nursing staff leadership emphasized the importance of extensive communication with and involvement of staff in developing changes, including the use of an expert nurse panel, which was important in gaining nurse buy-in for strengthening emotional support.

## Take-Away Lessons



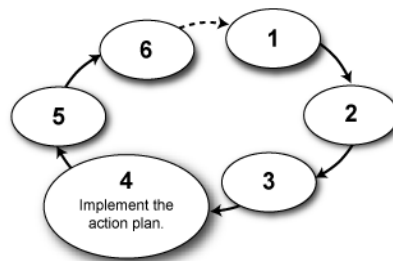
- When selecting an area of focus for improvement, consider whether concrete actions can be taken to improve performance in that area and the probability that those actions will (or will not) actually lead to success in improving performance.
- Define a clear overall strategy and the related actions required to achieve desired improvements.
- Proactively develop an action plan that specifically addresses the root causes of the problems. Ensure that the actions are linked to the improvement goals.
- Design a multifaceted improvement strategy and include relevant actions to address various aspects of the system, as it is unlikely that fixing only one process within a broken system will lead to significant and sustainable improvement.
- Include in the action plan details concerning timelines, what is to be measured, who is collecting and disseminating information, and who is ultimately responsible.
- Measure progress in making improvements by tracking specific measurable behaviors identified in the surveys and other performance measures in order to reinforce their importance and monitor progress toward improvement.
- Get buy-in from leadership for the action steps and the monitoring process.

## Step 4: Implement the Action Plan

### *What Did the Hospital Do?*

In 2004 and 2005, the hospital implemented the formal action plan developed in Step 3, focusing on three main areas:

- Strengthening the focus on patient service
- Improving communication with patients
- Providing support to staff



For example, the hospital:

- Reported individual doctor and nursing unit scores on its own QI survey
- Added the annual nursing service goals for each nursing unit to the agenda of regular meetings
- Included in monthly nursing meetings discussion on specific patient complaints and patient comments on the Picker Hospital Surveys
- Hired from within 70 new charge nurses (35 already held a lead nurse position; 35 were promoted)
- Requested an add-on of \$140K to the nursing budget to cover the 5% increase in salary associated with the promotion of 35 new charge nurse positions
- Provided new uniforms for the nursing assistants.



### *What Were the Results?*

By the middle of 2005, the hospital had implemented its improvement strategy. The expectation was that the hospital's and the nursing department's increased focus on emotional support would lead to more positive feedback from patients. There had been minor setbacks in the initial timeline due to threats of nursing strikes and pressures for the nursing leadership to focus on budget cuts. However, the new charge nurse position produced immediate results in that the number of patient complaints dropped in those units where a charge nurse was present.

In this changing environment, the nursing assistants reacted more negatively to their new uniforms than nursing leadership expected; however, the decision was made to keep the uniforms and press on with the other changes.

It is a common in QI initiatives for there to be tension between “staying the course” and “making mid term corrections”. This leadership dilemma is often driven by the context of the time and the culture of the organization. In this case, the Chief Nursing Officer chose to “stay the course” because of several reasons. She was intent on figuring out a way to distinguish the nursing assistants from the RNs. Patients not

being able to distinguish the types of nursing staff clearly was both a communication issue and a safety issue. Prior to the Emotional Support initiative, the nursing department had tried several other avenues to distinguish between the nursing roles, all with little success. They had tried name tags with their titles. They had tried other forms of patient education around nursing roles. None of them had been successful. In addition to this, the CNO knew that their move to a new hospital building was imminent and that the future appearance of the nurses would need to be aligned with the new clean modern appearance of the new hospital building. The longer term plan was eventually at the new hospital to have all nursing staff wear uniforms. In addition, the CNO felt that she had allowed for nurse input into the uniform selection process, which had included several meetings and the nurses themselves had voted on the material and the color of the uniforms. Overall, all of the factors led the CNO to stay the course because the change was too important of a step in the overall change in culture that was needed at the hospital.



### ***Take-Away Lessons***

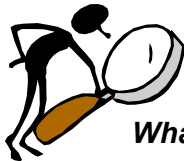
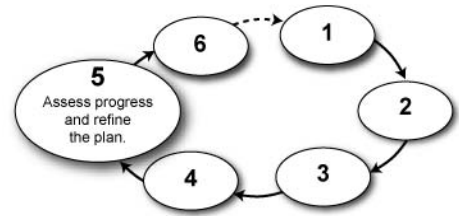
- Major changes in staffing, training, promotion, performance evaluation, hiring, and other processes may be necessary.
- Keep in mind that major changes, such as adding new managerial positions or changing what staff is required to wear, can be disruptive to organizations and individuals. Therefore, possible changes should be assessed carefully before being implemented to ensure that the benefits are worth any disruptions involved.
- Don't let initial pushback from stakeholders or external pressures derail QI efforts; stay focused on improvement efforts.
- Attend to the mindset of the organization and morale of all stakeholder groups. Getting all staff "on board" with a new concept or approach is essential for changing the performance of one or more targeted departments. This was apparent to the nursing leadership when they had pushback from the nursing assistants about the new uniforms.
- Try to anticipate challenges and prepare actions to manage them proactively (e.g., through the use of communications and training).



## Step 5: Assess Progress and Refine the Action Plan

### What Did the Hospital Do?

- Monitored performance measures over the course of the QI intervention and compared them to performance goals.
- Discussed performance issues with the QI committee after scores were analyzed.
- Delivered quarterly performance reports to the Hospital Executive Committee and hospital Board of Directors.
- Arranged for an external process evaluation to be performed, which provided feedback to the hospital on the progress of quality improvements based on individual interviews conducted with members of the QI team and the Hospital Executive Committee, and focus groups conducted with three groups of interested parties: nursing staff, nursing unit directors, and patients.



### What Were the Findings from the Process Evaluation?

- The nursing staff appeared to not know that their roles and performance expectations had changed.
- Most groups had a positive attitude about, and high expectations for, the new charge nurse position. They saw the potential impacts to be:
  - Improved processes for consistency and continuity of care
  - Better understanding by nurses of who to go to with problems
  - Greater ownership of problems and solutions
  - Improved hand-offs between the day and night shifts
  - Improved peace of mind and confidence of patients in their nursing care
- The specific functions and responsibilities of the new charge nurse position were not made fully operational. More work was needed, and quickly, to make the charge nurse role come to life before the initial momentum of the change was lost.
- Student nurse volunteers conduct the hospital's QI survey in-person with patients while the patients are still in the hospital. Some of the early survey findings suggest that the volunteers did not at first receive enough training. For example, the survey indicated that patients did not know the names of their doctors. But the findings may reflect problems with survey administration rather than problems with patients knowing who their doctors are. The question required that volunteers show pictures of the doctors to patients and allow them to identify their doctors by name or picture. If the volunteers did not take the time to print out the doctor photos before administering the survey, patients would not be able to answer the survey question in the way the survey intended. All staff focus groups articulated the need to train

the volunteers to follow the survey scripts and protocols to ensure that the questions are asked correctly and consistently among all volunteers and patients.

- Nursing unit directors did not appear to be sharing the findings from the hospital's QI survey with nurses. Some reported that they did not trust the survey information and were therefore disinclined to share it.
- The executive management rounds were well received.

Clear differences in perspectives emerged from the focus groups.

- Nurses suggested that to improve patient care, the hospital needed to address the "staffing overload" of both nurses and ancillary units (pharmacy, equipment, and supplies).
- Nursing unit directors indicated that to improve patient care, the hospital needed to reduce the amount of time nurses spend on maintaining patient charts, completing discharge/admission paperwork, and obtaining needed supplies. The unit directors pointed to the need for quicker pharmacy processing, more efficient environmental operations (i.e., cleaning of rooms as patients transfer out and new patients are admitted), and the integration of information technology.
- Patients indicated that to improve care, the hospital needed to address environmental issues (i.e., noise control, timeliness and efficiency of food delivery, and general cleanliness) and improve communications (language skills, and frequency and content of information) between staff members and patients.

### **How Were the Action Plan and Quality Improvement Strategy Refined?**

The hospital made several changes in response to the process evaluation findings.

- Revised job descriptions and performance evaluations.
  - Established a procedure for communicating with nursing staff about the new job descriptions and performance expectations.
  - Revised job descriptions and performance evaluations so they are based on the standards in the new general care guidelines and evidence-based guidelines (from Step 4) for patient interactions.
  - Developed a new job description and performance evaluation for the nursing unit directors, using the same approach.
  - Addressed the new aspects of the job descriptions and performance evaluations clearly in the orientations for new staff and in training at all levels. This was a long process and required getting buy-in at many levels. It took up to 14 months to embed these expectations into the new-staff orientations.

- Strengthened support for the new charge nurse positions.
  - Provided guidance to nursing unit directors as to what the role of the new charge nurses should be, ensuring that expectations would be consistent among all units.
  - Described the role of the charge nurses and performance expectations in the charge nurses' orientation and training.
  - Improved strategies to retain the new charge nurses (many nurses left for better-paying jobs in other hospitals *after* the case study hospital had invested in their mentoring and on-the-job training).
  - Provided informal learning opportunities, meetings, and workshops where new charge nurses could learn from each other.
  - Assessed which nursing processes and practices are standard among all units and conducted efficiently, and considered standardizing other practices.
- Refined the way that the hospital's QI survey was used to increase accountability for staff behaviors that improve emotional support to patients.
  - Developed an informational document about the survey targeted at survey participants. The goal was to reinforce both the importance of offering emotional support to patients and the hospital's intent to measure and hold staff accountable for service-related behaviors.
  - Developed written procedures for conducting the survey and for applying survey data for improvement.
  - Determined if the student nurse volunteers were asking the survey questions as stated and in the way intended by the survey designers; conducted focus groups with patients to determine if the questions were understood by patients in the same way that the survey designers intended them.
  - Expanded training for the volunteers who administer the survey.
- Expanded on the executive management rounds.
  - Communicated to the nurses in more detail the purpose and goals of the executive management rounds.
  - Required executives to perform the rounds regularly and visibly. Executive management reported to the nursing unit directors their observations from the rounds and any follow-up actions that needed to be taken by the nursing staff or staff from other departments. This information was then shared with all staff. Once changes or improvements were made this was also shared.

Besides refining the improvement strategies, hospital leadership decided to include the patient experience data in the hospital “score card.” As of 2005, the hospital measured its performance in five major areas (operations, finances, technical quality, patient experience, and hospital workforce) and reported them together as a score card. For each of these measures, the hospital set a monthly target and an annual goal. Prior to 2005, the hospital had monitored these measures, but had not reviewed them together to gain a picture of hospital performance as a whole. In the area of patient experience, the hospital monitored:

- Whether or not staff introduced themselves to patients.
- How well staff provided emotional support to patients/families.
- Patient experience with the discharge process.
- Whether or not patients would recommend the hospital to family or friends.
- The number of medical doctor referrals to hospital specialists.

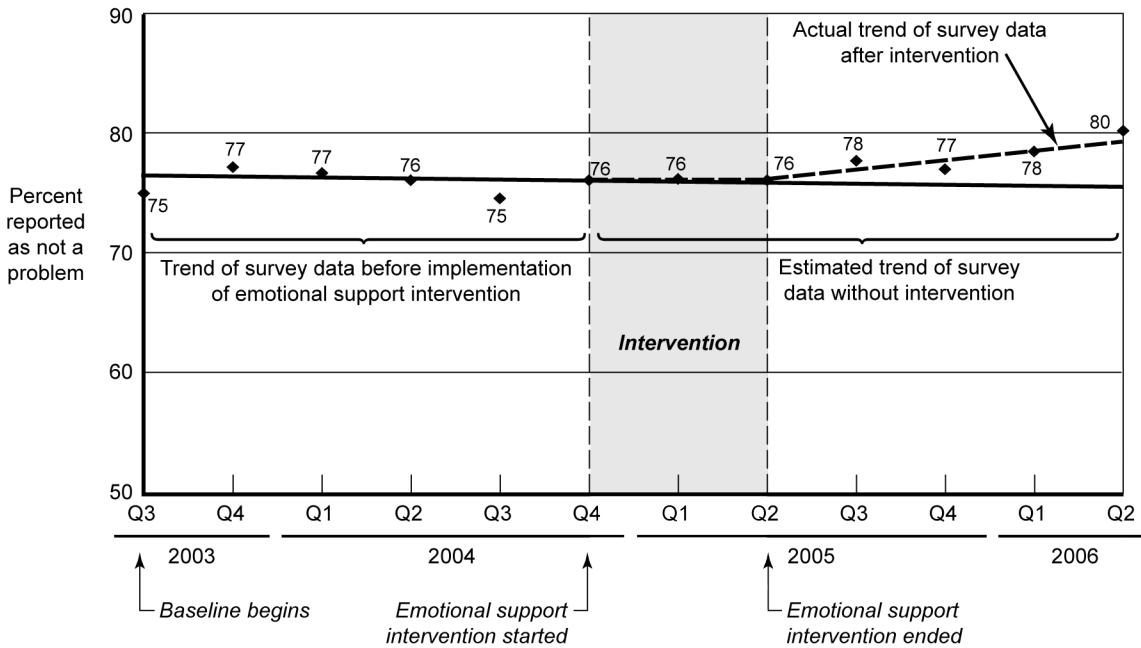


### ***What Were the Results?***

By the beginning of 2006, the executive leadership of the hospital agreed that the actions implemented in late 2004 and early 2005 had improved at least one aspect of emotional support delivered to patients by nursing staff—nurses were more likely to discuss a patient’s anxieties and fears with the patient. They had also begun to hear positive anecdotal evidence from patients about nursing care.

Figure 2 shows the progress of survey data from the third quarter of 2003 to the second quarter of 2006. The Figure is divided into three time periods. The first shows the baseline data values prior to any implementation of the emotional support improvement strategies. The middle period depicts the implementation period. The top dotted line shows actual data values as emotional support improved during implementation. The bottom line is an estimate of what the survey data would have shown if the data trend reported prior to the implementation had continued. The third period shows post-implementation trends for both the actual observed data values (the top dotted line) and the continuation of the extended baseline trend (the bottom solid line). An increasing number of patients over time reported not having a problem talking to their nurses about their anxieties and fears, which indicates improvement.

**Figure 2. Data reflects improvement: Patients reported that nurses discussed patients' anxieties and fears with patients**



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A comparative analysis of the projected baseline trend data and post-intervention trend data from Q4 2004 to Q2 2006 was conducted on all six of the following aspects of emotional support (two of which are provided by nurses):

- If you had any anxieties and fears about your condition or treatment, did a doctor discuss them with you?
- Did you have confidence and trust in the doctors treating you?
- If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?
- Did you have confidence and trust in the nurses treating you?
- Was it easy for you to find someone on the hospital staff to talk to about your concerns?
- Did you get as much help as you wanted from someone on the hospital staff in figuring out how to pay your hospital bill?

However, two of the items and their comparative analyses were considered most important since they were most closely linked to the QI initiative: “If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?” and “Did you have confidence and trust in the nurses treating you?”

In the case of nurses discussing patient’s anxieties and fears with patients, a statistical difference was found between the projected baseline trend data (the bottom solid line in Figure 2) and the actual post-intervention trend data (the top dotted line) – indicating significant improvement. Reviewing Figure 2, this improvement first became significant a

full year after the start of the implementation process. Improvements definitely take time especially in large complex environments.

The trends for all the other aspects of emotional support, including the one other aspect of emotional support provided by nurses--i.e. confidence and trust in nurses--were found to be flat; i.e., no difference was detected between the projected baseline trend and the post-intervention trend.

This statistical difference in scores from 76 to 80 was also considered practically relevant by hospital leadership because the changes were consistent over time and also in the correct direction. This consistent upward shift in scores overtime was a signal to the hospital that they were on the correct path and it was a direct effect of their efforts to improve the patient experience which they believed would preserve their market share – present and future. The hospital leadership also understood how hard it is hard to move patient experience scores, so consistent movement overtime in the correct direction was considered a success, even though they recognized there was still more to be done to *sustain* the improvements.

### ***Take-Away Lessons***

- Put extra effort into thorough, straightforward, formal, informal, group, and individual communication with all interested and affected parties. Communicate in a variety of settings and formats and expect that communication will be important on an ongoing basis in order to succeed.
- Provide training as needed to ensure that management and staff have the information and skills they need to accommodate change and to meet new performance expectations.
- Conduct a process evaluation during the implementation process and expect to make mid-course corrections to action plans and longer-term adjustments to goals and strategies.
- Keep leadership informed of progress and of the issues that require their action or support.
- Showcase successes and publicly congratulate those who are responsible.
- Be patient. Some actions may show positive results immediately; others may take several quarters; and others may not work at all. Not all targeted and relevant measures may improve; measures that target specific behaviors are easier to influence.
- Remain persistent about focusing and refocusing efforts to eventually see widespread improvement.

## **Step 6: Monitor Improvements to Make Sure They Stick**

### ***What Did the Hospital Do?***

- Continued to monitor data from its QI survey and PHS scores to make sure that improvements continued.
- Began to prepare for events that might compromise these gains as it looked forward to a move to a new facility. For example, the hospital knew that as nurses left the hospital and new nurses were hired, it would need to continually reinforce the importance of service-oriented patient interaction and patient centered care. Discussion of these topics was integrated into new-staff orientation.
- Remained committed to QI and pursued several additional QI projects using the CAHPS data. This recommitment by executive leadership to QI and patient experience data elevated its importance and priority among mid-level managers of the hospital.
- Continued to monitor its activities with the hospital score card. In terms of patient experience, the hospital continues to monitor closely:
  - Whether or not staff introduce themselves to patients.
  - How well staff provide emotional support to patients/families.
  - Patient experience with the discharge process.
  - Whether or not patients would recommend the hospital to family or friends.
  - The number of referrals from non-hospital medical doctors to hospital specialists.

For each of these measures the hospital has set a monthly target and an annual goal.

### ***What Were the Results?***



The hospital worked to maintain improvement in the emotional support provided by nurses for three quarter-year periods. For example, as they prepared for the move to the new facility, hospital and nursing leaders kept in mind the importance of continuity in communication and behavior to maintain gains. They also understood the value of reviewing all measures in a united scorecard and the importance of ongoing monitoring of key measures and components of care.

The hospital leadership also acknowledged that they have benefited greatly from being an earlier adopter of H-CAHPS because of the continued push for pay for performance. When the Emotional Support initiative started, there was talk of pay for performance metrics for hospitals. Given that the hospital leadership had adopted H-CAHPS early, the hospital was able to stay ahead of the curve in terms of focusing on the hospital's performance on patient experience scores and able to identify the hospital's areas of weakness. Being able

to be prepared for the pay for performance push allowed the hospital to take advantage of the P4P system financially and have a more immediate and direct effect on revenue from the CMS P4P program to the hospital.



### ***Take-Away Lessons***

- Continuously monitor indicators such as CAHPS and other patient experience surveys alongside other data to make sure improvements stick.
- View QI as an iterative process that is designed to make incremental progress toward clearly defined performance goals through constant monitoring of relevant measures and feedback to guide refinements of implementation strategies and actions.
- Try to anticipate challenges that may emerge due to changes in the organization, its environment, or its patients' needs.



## THE CASE STUDY IN MORE DETAIL

### BACKGROUND

The case study hospital is a large acute-care urban hospital with more than 600 beds. Affiliated with a university campus, it is a teaching hospital. It offers patients of all ages comprehensive care, from routine to highly specialized medical and surgical treatment. Among its resources are specialized intensive care units, state-of-the-art inpatient and outpatient operating suites, a Level-1 trauma center, and the latest diagnostic technology. It also has a staff of over 1,000 physicians and 3,500 nurses, therapists, technologists, and support personnel. More than 300,000 people from the immediate urban neighborhood, across the country, and around the world come to the hospital each year to receive care.

The emerging age of consumerism in healthcare is forcing hospitals to reexamine their traditional practices and be more responsive to patient preferences and experiences. The leadership of our case study hospital understood that attracting patients depends partly on the “service” component of patient care; i.e., the way patients experience care in the hospital including the quality of communication and the emotional support they receive. Moreover, research shows that “patient-centered communication is a basic component of nursing and facilitates the development of a positive nurse-patient relationship which, along with other organizational factors, results in the delivery of quality nursing care.”<sup>2</sup> In other research, findings show that when advanced-practice nurses and physicians participated in an intervention to improve case management and facilitate communication and collaboration among health care providers, their hospital patients reported better emotional support and physical comfort.<sup>3</sup>

### Survey Tools and Data Sources Used by the Hospital

As part of its QI process, the hospital used (and continues to use) several surveys to measure the patient experience with various aspects of care. Most of the surveys include questions about emotional support.

Patient experience measures are highly valued at the hospital by the executive leadership because, as members of the patient experience quality improvement committee have said, “It helps the hospital understand what issues are important to patients in the care process.” However, patient experience data have not been perceived by executives to be as important as clinical performance measures until recently when purchasers and consumer groups began to demand performance data on the patient experience. The hospital currently relies on the Picker Hospital Survey (quarterly) and the hospital’s QI survey (monthly) to monitor, assess, and compare its progress and performance in the patients’ experiences of care.

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<sup>2</sup> McCabe, Catherine 2004 “Nurse-patient communication: an exploration of patients’ experiences,” *Journal of Clinical Nursing* 13, 41–49, Blackwell Publishing Ltd.

<sup>3</sup> Hays, Ron D., Jo-Ann Eastwood, Karen Spritzer, Marie Cowan, April 2006, “Health-related quality of life and patient reports about care outcomes in a multidisciplinary hospital intervention,” *Annals of Behavioral Medicine*, Volume 31, Number 2, 173-178, Springer-Verlag New York, LLC.

### ***Picker Hospital Survey (PHS)***

The hospital began using PHS in 1994 to assess the following dimensions of care:

- Continuity and transition (four items)
- Coordination of care (six items)
- Emotional support (six items)
- Information and education (five items)
- Involvement of family and friends (three items)
- Physical comfort (five items)
- Respect for patient preferences (four items)
- Overall impressions of care (eight items).

Unfortunately, the Picker organization (but the Picker *survey* continues to be used) went out of business in March 2000 and the hospital had to scramble to find a new vendor to support its QI initiatives. The National Research Center Corporation (NRC) became the new vendor in November of 2000, and has been the hospital's survey vendor-- administrator of PHS--ever since. There is a gap in the performance data from March 2000 to November 2000<sup>4</sup> because there was no organization to collect the PHS data.

### ***The Patient Evaluation of Performance project***

As the consumer experience of healthcare began getting increased attention nationwide, a statewide "Patient Evaluation of Performance" project was launched. The project was a result of a partnership between two independent organizations dedicated to improving health care quality. Every hospital in the state was asked to participate in the groundbreaking surveys of randomly selected adult medical, surgical, and maternity patients who were admitted for at least one night. The case study hospital chose to participate.

Scores are made public to help patients make informed hospital choices, allow hospitals to compare their scores, and encourage underperforming hospitals to improve.

The project started in August 2001 with 113 volunteer hospitals. In the second round of the project in June 2003, 181 hospitals voluntarily participated in the survey. In the third round in September 2004, 200 hospitals volunteered to participate.

The survey is administered by a vendor at an annual cost to the hospital of approximately \$105,000. The survey allows the hospital to trend patient experience data over time, track patients' experiences, and compare the experiences of its patients with the experiences of patients in other hospitals.

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<sup>4</sup> Of note, data from the Patient Evaluation of Performance project were collected for the patients discharged from August to October 2000. Therefore, the gap in the patient survey was from March 2000 to August 2000.

### ***Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey***

Later, the hospital transitioned from PHS to the Consumer Assessment of Health Providers and Systems (CAHPS) survey and supplemented it by including the emotional support items (questions) that had been on PHS. The hospital fielded this CAHPS “core plus” survey for the first time in September 2004.

The CAHPS survey is designed for use by all hospitals and covers the main areas of hospital performance according to patient experience. These are:

- Nurse communication with patients
- Doctor communication with patients
- Communication about medication
- Nursing services
- Hospital’s physical environment
- Pain and pain control
- Discharge information
- Patients’ overall ratings of the hospital
- Whether or not patients would definitely recommend the hospital to family and friends

The Consumer Assessment of Healthcare Providers and Systems (formerly the Consumer Assessment of Health Plans Study (CAHPS®) was initiated by the Agency for Healthcare Research and Quality (AHRQ) (an agency of the Federal Department of Health and Human Services) in 1995 to establish survey and reporting products that provide consumer information on health plan and provider performance as judged by other consumers who use the health plans. A CAHPS® family of measurement instruments now exists for many types of care, including ambulatory care, hemodialysis, hospital inpatient care, nursing homes, American Indian healthcare, assisted living, and care for patients with mobility impairment.

CAHPS focuses primarily on providing information to help consumers make informed health provider choices. However, it was learned during the first CAHPS development work that various stakeholders have very different perspectives and uses for the CAHPS survey information. In particular, health plans and health care providers expressed concerns that the CAHPS survey does not provide information that is specific enough to guide their efforts for improving performance in the areas that are important to consumers.

AHRQ initiated CAHPS II in 2002. A goal of CAHPS II is to address the issues raised by health plans and providers regarding the limited usefulness of CAHPS information for their QI efforts. One of the activities being undertaken to address this goal is QI “demonstrations” to develop and test tools to support user QI activities, learn from their experiences in implementing new practices to improve performance, and assess the effects of those interventions on changes in CAHPS scores over time.

CAHPS is developing a survey tool specific to hospitals. As part of the Department of Health and Human Services’ (DHHS) hospital public reporting initiative, the Centers for Medicare and Medicaid Services (CMS) have created an instrument and data collection

protocol that may be used by hospitals to collect comparable data that may also be used to publicly report hospital patient perspectives on the care they receive.

CMS is currently working with the AHRQ to develop this standard, called CAHPS for hospital surveys. AHRQ and its grantees in CAHPS I had developed a version of CAHPS for the managed care industry that is currently used to assess the care provided by health plans covering over 123 million Americans.

CAHPS' purpose in hospitals, as seen by CMS, is to provide publicly available comparative performance information on hospitals. Such information can help consumers make more informed choices when selecting a hospital and can create incentives for hospitals to improve the care they provide. The CAHPS approach is accepted as the standard for measuring consumers' experiences within the healthcare system.

CMS partnered with AHRQ and developed a 27-item (question) hospital CAHPS instrument and data collection protocol. Hospital CAHPS contains the following domains plus an overall rating of the hospital (one item), a statement as to whether the patient would recommend the hospital to family and friends (one item), and demographic items (five items):

- Nurse communication with patients (three items)
- Doctor communication with patients (three items)
- Communication about medication (three items)
- Nursing services (three items)
- Physical environment (two items)
- Pain and pain control (three items)
- Discharge information (three items)

The hospital realized that it needed to collect patient experience data through multiple venues standardized among many hospitals for benchmarking, as well as specific data tied to the experiences and complaints of its own patients. Moreover, to ensure that the hospital collected data on a variety of aspects of patient experience and those identified as hospital priorities, the executive committee, the Patient-Relations Director, and the QI director committed to administering the CAHPS survey integrated with some additional questions specific to the hospital (as encouraged by CAHPS), including the emotional support and coordination-of-care items. The timing and the choice of administering the core hospital CAHPS survey along with the hospital's own items were driven by uncertainties in the federal Centers for Medicare & Medical Services policy on mandating the hospital CAHPS survey and cost issues internal within the hospital. Items for the survey were selected based on the ability to trend the items over time and whether or not information about certain QI measures was available internally.

### ***The Hospital's Own QI Survey***

The hospital developed and began using in 2003 its own QI survey to obtain additional detail about the issues identified in the other surveys. This patient survey focused on specific doctor/nurse-to-patient or resident-to-patient communication behaviors such as

whether or not the doctors and nurses introduce themselves to patients or ask how they can help patients. Hospital leadership was particularly interested in patients' write-in suggestions for additional hospital improvement.

In September 2003, the hospital developed a second patient survey to provide additional content which would enable it to better understand patients' views on hospital care. The implementation of the hospital's own QI survey coincided with a mandate from the Joint Commission on Accreditation of Healthcare Organizations (JACHO), Standard RI 2.60, which required that patients be informed of the name of the physician primarily responsible for their care and that this information be given to the patient on a timely basis as defined by JACHO. At about the same time, several residency program directors requested a tool to evaluate their residents' performances. The hospital's QI survey satisfies both requirements. It is administered by student nurse volunteers.

### ***Patient Complaint Data***

The hospital collects patient complaint data from three sources:

- Comments from the PHS. The vendor for PHS provides the hospital with verbatim comments from patients about their hospital stay and care. Staff members may or may not be identified by name. This information is used by the hospital to learn more about customer service issues and to provide feedback to relevant units.
- Service alerts.
- The hospital's QI survey. In this survey, staff are identified by name and nursing unit directors can choose to act on specific complaints when appropriate.
- Hospital records of patient complaints. Patient complaints are recorded in the Patient Relations database when patients go directly to the Patient Relations Department and file a complaint. Staff names are sometimes included in these complaints. The complaints are acted upon. Those comments from patients that do not identify a staff person by name are also shared directly with the staff on a periodic basis to raise awareness and augment training.

Several issues were important when utilizing patient complaints to increase accountability: getting feedback to the appropriate units in a timely manner; identifying the staff members involved in incidents; clarifying the circumstances related to the complaints; and understanding the meaning and underlying issues surrounding the patient comments.

### ***Comparative Information***

Comparative information is vital for the hospital in monitoring its overall performance and the success of its QI initiatives. The most important source of comparative information has come from the hospital's participation in the Patient Evaluation of Performance project, but it has also obtained data from its survey vendor, NRC, on University Health Consortium hospitals and non-academic hospitals.

The comparative data allows the hospital to benchmark its performance against other hospitals in the state and to reconcile comparative data of hospital performance with other sources such as the "U.S. News & World Report" ranking of hospitals.

The hospital needs a more consistent and comparable group of hospitals against which to benchmark its performance. The cohort of participants in the Patient Evaluation of Performance project has changed over time, which has made it difficult to benchmark the hospital's performance against a consistent, unchanging group of similar hospitals. The survey instrument has also changed, most recently as a result of the development of the hospital CAHPS measures and the statewide Hospital Assessment and Reporting Taskforce initiative, which promoted the standardization and administration of six key items on all hospital surveys state-wide. Therefore, the survey dimensions and scales are not currently consistent with the PHS. Finally, both community hospitals and academic hospitals (like the case study hospital) are surveyed, and they have differing abilities and capacities for change; community hospitals can be more nimble, for example. As a result, the hospital has paid more attention to trends in its own performance scores, but acknowledges that to maintain its public reputation it is important to track comparative data with several relevant hospital populations.

**Table 1: Overview of surveys used at the hospital for QI**

Survey	PHS administered by NRC	Hospital CAHPS survey (CAHPS 27 core items plus hospital's add-on questions)	Hospital's own QI survey
<b>Type</b>	Consumer, complaint (open-ended questions), comparative	Consumer, comparative	Consumer, complaint
<b>Population</b>	Inpatients in pediatrics, OB, medicine, and surgery are asked about the care provided	Inpatients in pediatrics, OB, medicine, and surgery are asked about the care provided	Inpatients still in the hospital in pediatrics, OB, medicine, and surgery are asked in person about communications issues w/ residents and nurses
<b>Mode</b>	Mail; sent two weeks after discharge	Mail with phone follow-up to non-respondents	In person, by student nurse volunteers
<b>Years</b>	1994-2000 (one site only); July 2003 until the present in both hospital sites	2004 - present	September 2003 - present
<b>Dimension</b>	<ul style="list-style-type: none"> <li>• Respect for patient preference</li> <li>• Coordination of care</li> <li>• Information and education</li> <li>• Physical comfort</li> <li>• Emotional support</li> <li>• Involvement of family and friends</li> <li>• Continuity and transition</li> <li>• Patient safety</li> <li>• Surgery-specific dimensions</li> <li>• Childbirth-specific dimensions</li> <li>• Overall experience</li> <li>• Other customized dimensions</li> </ul>	Hospital CAHPS contains the following domains plus an overall rating of the hospital (1 item), a determination of whether the patient would recommend the hospital to family and friends (1 item), and 5 demographic items: <ul style="list-style-type: none"> <li>• Nurse communication with patients (3 items)</li> <li>• Doctor communication with patients (3 items)</li> <li>• Communication about medication (3 items)</li> <li>• Nursing services (3 items)</li> <li>• Physical environment (2 items)</li> <li>• Pain and pain control (3 items)</li> <li>• Discharge information (3 items)</li> </ul>	Communication issues
<b>Items</b>	Adult medical and surgery: (80); OB: 77; pediatrics: 87	27 items including 5 demographic items	17
<b>Frequency</b>	Continuous with quarterly reports	Collected in one episode covering a 3-month period of discharges	Continuous with monthly reports
<b>Benchmarking</b>	Patient Evaluation of Performance project, University Health Consortium, own trend	In development through the National CAHPS Benchmarking Database	Own trend only

## **The Hospital's Leadership and Quality Improvement Team**

When the hospital began its QI efforts, it had been undergoing major management changes. It transitioned from eight months of management under a consulting group to a new senior management team. In the period from July 2004 to October 2005, an entirely new executive leadership team was installed. It included the hospital's Chief Executive Officer (CEO); Associate Vice Chancellor; Associate Vice Chancellor for the Faculty Practice Group; Chief Operating Officer; and Medical Sciences Chief Financial officer.

These executives are part of the approximately ten-member Hospital Executive Committee, which represents the highest level of leadership at the hospital and actively supports the QI effort. The committee is responsible for: (1) developing and communicating the overall hospital vision; (2) walking around the various areas of the hospital to stay in touch with day-to-day operations, identify problem areas, and ensure that both the executive committee and staff are accountable for the hospital's performance; (3) acknowledging and rewarding service excellence; and (4) increasing middle management accountability for service.

The new CEO of the hospital developed a motto called "the three Bs"--Best People, Best Experience, and Best Performance. The CEO had been in charge of quality programs in a former job and naturally had a strong interest in quality and patient care. Another goal was to be "the safest hospital."

The hospital's QI initiative was carried out by a designated QI Team. The QI team was in charge of completing the six quality improvement steps and included:

- Nursing leadership represented by the Chief Nursing Officer (CNO) and Director of Nursing (QI team leader)
- QI project director (coordinator of QI effort)
- Patient-Relations Director
- Registered nurses, nursing assistants, and other nursing staff
- Nursing unit directors
- Physicians
- Representative from the human resources department

This QI initiative was endorsed by the medical staff Performance Improvement and Patient Safety Committee. The Chief of Staff of the hospital and the Chief Medical Officer of the hospital were co-chairs of this committee. The planning group includes the two co-chairs, the Director of the Medical Group, and the Vice Provost of the hospital Medical Group Affairs, the Chief Nursing Officer, and the QI project director. The patient safety committee is the clearinghouse of QI projects and progress reporting and includes the Medical Staff Executive committee members (made up of chairpersons from the Departments of Medicine, Surgery, etc.) and the Hospital Executive Committee members.

The Committee to Help Optimize Patient Experience was created in 2002 by the Hospital Executive Committee is the planning group for developing, implementing, and sustaining interventions to improve the patient experience. The committee and its Project Director



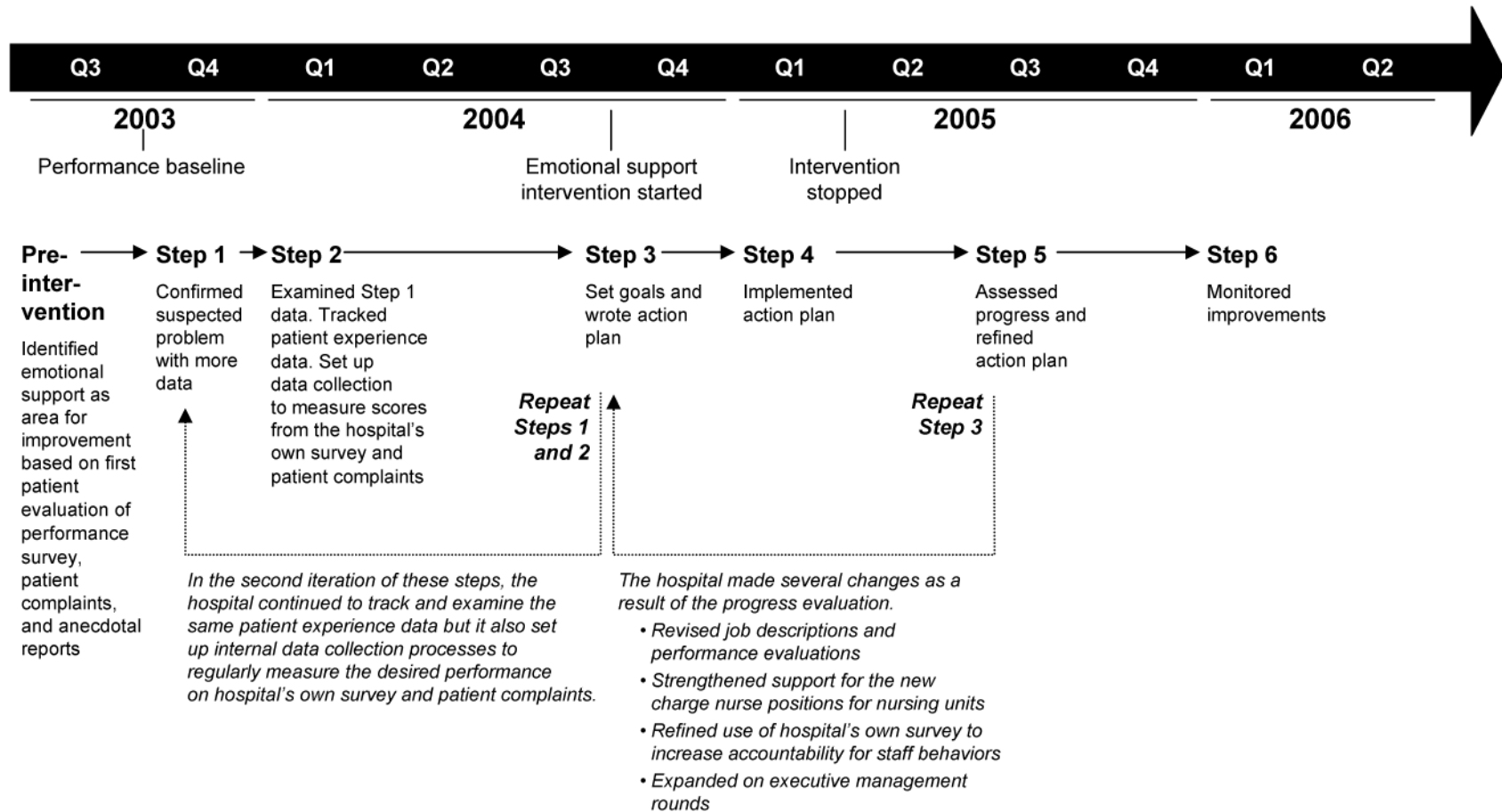
serve many functions in the QI process. Importantly, they review and analyze the hospital's performance data, identify key problem areas, and brainstorm on what problems and issues the hospital should prioritize and work on in the coming year. This committee set the QI priorities and defined the specific activities and interventions needed for process and performance improvement.

### **Timeline of the QI Process**

The timeline in Figure 2 illustrates how the hospital implemented the six steps in the Plan-Do-Study-Act cycle over time. By showing the passage of time and the reiteration of some steps, it reinforces some key lessons from this and most other efforts to implement change:

- Change takes time.
- First efforts may not be successful.
- Persistence pays off.

Figure 2. One hospital's QI timeline



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Table 2 summarizes the hospital's decisions and activities during the QI process. The step-by-step process summarized earlier in this report is described in more detail in the pages that follow.

**Table 2. Sequence of major hospital decisions and activities during the quality improvement process**

QI step	Time period		Decisions and activities
1	July	2003	Established July 2003 as performance baseline for patient experience
	September	2003	Began first improvement intervention, using PDSA and own QI survey
	Late	2003	Studied patient complaint data, anecdotal reports
	Late	2003	Compared performance on PHS emotional support measures to performance of similar hospitals. When third year PHS data in the Patient Evaluation of Performance project were reported, hospital was able to compare its performance not only with that of other hospitals, but with that of other <i>academic</i> hospitals, like itself
2	January	2004	Developed first patient information brochures
	Early	2004	Designed and administered a patient survey that focused on specific emotional support and communication behaviors—the hospital's QI survey. The hospital was particularly interested in improvements responsive to patient write-in comments
	April – Aug	2004	Revised charge nurse role; required nurses to document daily patient conversations; began executive management rounds; revised job descriptions and performance evaluations
	July	2004	New management promoted new motto: Best people, best experience, best performance; hospital selected emotional support as highest priority with greatest chance of success for improvement and chose to focus on nurses rather than doctors
4	Jan – Mar	2005	Hired first new charge nurses
	April	2005	Engaged student nurse volunteers to help answer patients' call buttons
	Mid	2005	Conducted process evaluation. Observed staff-patient interactions, met individually with QI team and executive committee members, and conducted group discussions with key quality improvement implementers, staff and charge nurses, nursing assistants, nursing unit directors
5	Summer	2005	Executive managers began making rounds
	Late	2005	Began using hospital CAHPS survey; included scores in hospital score card and in patient experience data along with PHS dimensions of care
	Continuous	2005 - 2006	Continued to monitor own QI survey and PHS scores for continuous improvement; monitored proprietary emotional support questions; responded by addressing potentially troublesome areas; worked with PHS and CAHPS survey vendors to dig deeper and measure specific areas of concern.

## **STEP 1: CONFIRM THE SUSPECTED PROBLEM BY GATHERING MORE INFORMATION**

The hospital embraced the philosophy of patient-centered care and for many years used the Picker Hospital Survey (PHS) to collect information about its performance. During 1995 and 1996 when there were no benchmark comparisons available and about 82 percent of patients surveyed rated care highly, the executive management team and leadership committee thought that the hospital was performing well. However, in 1997 when the hospital's survey vendor started to provide comparative data on hospital performance, the hospital was able to compare its performance to the performance of the University Health Consortium hospitals and non-academic hospitals. To its surprise, management discovered that the hospital was scoring low on several dimensions of patient experience, particularly in the areas of continuity of care, transition from hospital to home, and the emotional support offered to patients. Concern about these low-performing areas served as the initial impetus for improving the patient experience. The hospital leadership knew that to preserve market share and the average daily census, they needed to gain more respect from patients. They also hoped that it would help with staff morale and the high turnover in nursing staff.

In 1999, in preparation for the first public reporting of results from the Patient Evaluation of Performance project, which was scheduled for August 2001, the hospital began to organize a coordinated hospital-wide QI effort to improve its scores on the "continuity and transition to home" dimension of the survey.

In the process of reviewing performance data from the Patient Evaluation of Performance project in summer 2001, the Committee to Help Optimize Patient Experience and the executive leadership identified two dimensions on the survey that needed improvement: emotional support and the coordination of care. At that time, the problem scores for these two dimensions were similar, and therefore both were considered as candidates for the next QI intervention. However, coordination of care was ultimately not chosen as a priority. Some of the coordination-of-care issues were likely to be addressed by the move to the new hospital facility in 2007. Furthermore, hospital leadership made an effort to improve coordination of care in September of 2002 and, either because it was too early to expect results or the efforts were not adequate, the efforts had not yet yielded measurable results. The efforts included: (1) developing bedside descriptors to explain to patients the roles of attending physicians, residents, nurses, and other staff members; and (2) creating new screening forms and patient information sheets for radiology procedures so that residents and nurses can prepare patients before going down to the CT/MRI area. Emotional support was chosen as the area of focus.

In the first iteration of this step, the hospital leadership and QI team selected the following data to track and examine more closely:

- Findings from its own QI survey
- Patient complaint data
- Quarterly trend data of patient experience measures from PHS. The patient experience measures include: overall rating of hospital care received; responses to the question as to whether the patient would recommend the hospital to family and

friends; and the following emotional support survey items (composite scores on all six items and scores on each item individually)

- Doctor discussed with patient the patient's anxieties and fears
- Confidence and trust in doctor
- Nurse discussed with patient the patient's anxieties and fears
- Confidence and trust in nurses
- Ease of finding someone to talk to
- Help in understanding the hospital bill

In the second iteration of this step, the hospital reviewed the PHS data in several patient experience areas such as emotional support, coordination of care, continuity and transition, and involvement of family and friends, to establish a performance baseline, identify areas that need improvement, and select an area on which to focus improvements.

## **STEP 2: EXAMINE DATA GATHERED IN STEP 1 AND DEVELOP NEW MEASURES IF NEEDED**

The next step was to examine all of the data to get an overall picture of the problem, identify baseline performance trends, prioritize improvement efforts, and select the best measures for motivating change and tracking progress.

### **The Overall Picture of the Problem**

The PHS patient experience performance measures on emotional support selected during this first iteration of the Plan-Do-Study-Act cycle did not improve during the first quarter of 2004. They continued to get worse during the last two quarters of 2004 as the hospital collected survey and patient complaint data in the hopes of increasing accountability with nurses and doctors on service and patient communication behaviors. The hospital could not demonstrate improvement in emotional support performance in 2004. The hospital QI team went back to the drawing board and reexamined the data to discover how it might intervene in ways that would produce results.

At this same time, the hospital's executive leadership in charge of nursing and the nursing unit directors felt that their hands were tied. Through informal discussions conducted during staff meetings the nursing leadership learned that some of the nursing staff seemed to have a sense of entitlement; i.e., they behaved as though they had unlimited job security (because of the strength of the nursing unions) and discretion as to how well they supported patients' non-clinical needs (because the clinical needs of the patient population were so great and the nurses had a very heavy workload). Some nursing staff believed that offering emotional support services was an intrusion and bother to patients.

It was not always clear to nursing unit directors when staff should be terminated for poor performance; some expressed a reluctance to take action because nursing staff were unionized and the directors were concerned that any disciplinary action or termination would be challenged by the employee and/or the union. In addition, the staff felt that the Human Resources department would always take a patient's word against an employee's. Furthermore, the incentive system of "pay-for-performance" did not yet exist; rather, nurses were unionized and their salary decisions were made on the state level.

In the second iteration of this step, the hospital decided to continue to track and examine the same patient experience data, but it also set up internal data collection processes to regularly measure proprietary QI survey data and patient complaints. No additional measures were decided upon.

The hospital also compared its performance on the PHS emotional support measures to that of similar hospitals. When the third year of the PHS data in the Patient Evaluation of Performance project was reported, the hospital was able to compare its performance not only with that of other hospitals, but with that of other *academic* hospitals, like itself.

To provide a structure and logic for prioritizing issues to be addressed in its QI work and examination of data, the hospital chose to use the following five criteria:

- Level of performance – absolute levels and comparison to benchmarks
- Change in performance over time – amount of change and direction of change
- Correlation of dimension performance with overall quality ratings

- Ability to identify tangible actions that can be taken to improve performance
- Probability of success in achieving performance improvement with those actions

In an analysis of the hospital summary data from the second quarter of 2004, priority was given to the summary results from the adult medical and surgical inpatient survey since adult inpatients are the largest population served by the hospital. The analysis also focused primarily on the absolute levels of survey scores, with comparisons to the benchmarks and to the correlations to overall rating of care. Less emphasis was placed on changes in scores over time, because the sample sizes were considered too small to provide usable information. The improvement priorities identified were:

- Emotional support
- Physical comfort
- Involvement of family and friends
- Coordination of care

Two other criteria had been suggested by a committee of the Institute of Medicine of the National Academies: impact and inclusiveness. The committee's goal was to identify priority areas "that presented the greatest opportunity to narrow the gap between what the health care system is routinely doing now and what we know to be best medical practice." The committee recommended impact, improvability, and inclusiveness as the criteria for identifying priority areas.

The first two dimensions--emotional support and physical comfort--were very tightly grouped in terms of their low problem scores and the correlation of their scores to overall care (in absolute terms and compared to the hospital's Patient Evaluation of Performance project and other academic hospitals). The last two dimensions also had similar problem scores, but these were still better than those of the first two dimensions. This suggested that there were two high-priority dimensions, emotional support and physical comfort, and two medium-priority dimensions, involvement of family and friends and coordination of care. These four areas were the same four areas identified by the hospital.

Looking deeper at the specific items on the PHS within the four dimensions, it was observed that the individual items most strongly correlated to overall care *and* which also had the highest problem score were tied to the actions of nurses, and not necessarily of doctors. Within emotional support, the two items that performed poorly at an absolute level and also in comparison to both the Patient Evaluation of Performance project and other academic hospitals, were "confidence/trust in nurses" and "nurse discussed anxieties/fears." These two items were also highly correlated to overall care. In the emotional support and physical comfort dimensions, confidence in doctors was equivalent or better to the Patient Evaluation of Performance project and to other academic hospitals. In addition, within the coordination-of-care dimension for adult inpatients, the drivers of the problem score were the items "organization of emergency care" and "scheduled tests/procedures were on time." These items were a problem both in terms of absolute levels as well as compared to both the Patient Evaluation of Performance project and to other academic hospitals.

As a result of these findings, the hospital QI team considered the tangible actions needed to improve either of these dimensions and the probability of success. The hospital selected

emotional support as the highest-priority dimension for the next QI initiative. Emotional support had a high absolute problem score and its score compared poorly to the hospital data from the Patient Evaluation of Performance project and to other academic hospitals. In addition, it was deemed likely that the hospital's upcoming move to the new building would resolve many of the issues related to physical comfort and coordination of care. Importantly, it was thought that improving emotional support was feasible and that it could be improved by working with nurses and the nursing department. Therefore, the hospital chose to focus on emotional support and set forth to design interventions to improve emotional support of patients by increasing the accountability of nursing staff and doctors.

In the fall and winter of 2004, the hospital remained unsure about adopting hospital CAHPS because it was concerned about losing the trend data it had acquired while using PHS. But the hospital was able to add items to its existing PHS which would allow it to continue to track trends based on the core PHS items and incorporate the 27 hospital CAHPS items and subsequent composites. During the development of this integrated pilot survey, the QI demonstration continued, focusing on the hospital's emotional support QI initiative (based on the PHS dimension). It was left open for future discussion whether the hospital would undertake a second QI demonstration focusing on a QI initiative that would be addressed by a hospital CAHPS composite.

Under this revised strategy, the hospital selected an approach to evaluate the existing hospital QI initiative on emotional support consisting of the following steps:

- Further diagnose performance issues to provide additional information for the hospital
- Formalize the documentation of the emotional support interventions that the hospital was undertaking as part of the QI intervention by developing a written action plan for the overall intervention and its various components and strategies
- Perform a process evaluation of the QI intervention
- Perform an outcome evaluation of the QI intervention using data from the hospital's existing patient survey process.



### STEP 3: SET GOALS FOR IMPROVEMENT AND WRITE AN ACTION PLAN

The hospital chose to focus on emotional support, documented the specific actions and strategies it was already pursuing to improve emotional support, and wrote an action plan for improvement. For each strategy, the plan delineated:

- A framework for action
- Specific actions for each strategy
- Staff in charge of each action
- Timeline for each action with start and projected end dates
- Tools and resources needed/used to complete each action
- Measures and a monitoring schedule

The action plan formally identified and organized the hospital's specific activities into three main strategies: strengthen the focus on patient service; improve communication with patients; and provide support for staff. The strategies are described in more detail in the discussion of implementation in Step 4.

To ensure that the hospital as a whole strengthened emotional support, the Hospital Executive Committee, the Patient-Relations Director, and the QI project director committed to administering the hospital CAHPS survey integrated with some additional questions specific to the hospital (as encouraged by CAHPS), including the emotional support items. CMS policy uncertainties on mandating the hospital CAHPS survey and cost issues internal within the hospital drove the timing and the choice of administering the hospital CAHPS survey as an integrated survey; i.e., with the hospital's own items integrated into the standard CAHPS survey. Items for the survey were selected based on the ability to trend the items over time and whether or not information about certain QI measures was available internally.

When the CAHPS survey became mandatory in 2007, the hospital already had experience gathering and using patient experience data (from PHS and its QI survey), and was able to bridge the data from the other surveys to CAHPS<sup>5</sup> so it did not have to start over building a data base for tracking quality trends over time. And because emotional support was not an area covered by the CAHPS survey, the hospital continued to use its own QI survey for evaluating emotional support and integrated those findings with the CAHPS findings for a comprehensive look at the quality of the patient experience. The executive committee, the Patient-Relations Director, and the QI project director had reviewed all of the patient surveys and quality measures, and as a result developed a new assessment tool that includes the 27 hospital CAHPS measures, nine hospital assessment and reporting measures, and several custom questions mainly in the areas of emotional support and coordination of care.

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<sup>5</sup> *Bridging from the Picker Hospital Survey to the CAHPS<sup>a</sup> Hospital Survey*. Denise D. Quigley, Marc N. Elliott, Ron D. Hays, David J. Klein, Donna O. Farley. RAND document: EP-200807-09, 2008. Published in: *Medical care*, v. 46, no. 7, July 2008, p. 654-661.

The leadership of the nursing staff embraced the need to improve the emotional support provided to patients and they supported the specific actions and overall strategy. The new charge nurse position was also welcomed by the nursing staff because they saw it as a mechanism for bringing more continuity between the day and night shifts and for encouraging each nurse to address patient issues before the end of his or her shift. The nursing staff leadership emphasized the importance of extensive communication with and involvement of staff in developing changes, including the use of an expert nurse panel, which was important in gaining nurse buy-in for strengthening emotional support.

## **STEP 4: IMPLEMENT IMPROVEMENT ACTIONS**

In Step 4, the hospital implemented the three-part action plan: strengthen the focus on patient service; improve communication with patients; and provide support to staff.

### **Strengthen the Focus on Patient Service**

The hospital implemented several strategies to strengthen the focus on patient service. First, it implemented new evidence-based general care guidelines for nurse-patient interactions vetting each of the guidelines with an expert nurse panel.

Second, it created the new charge nurse position, which was a semi-managerial position and made a charge nurse available 24 hours a day, seven days a week. These positions were created for all units on both day and night shifts to provide patients and staff with one person in charge of overall problem solving and addressing issues consistently across the shifts.

Next, the hospital revised job descriptions and performance evaluations for the new charge nurses, for RNs (CN I, II, III), and for nursing assistants to include the new guidelines and highlight emotional support. The hospital began interviewing in November 2004 with the goal of hiring 70 new charge nurses. All were hired in-house, with 35 hired from current lead nurse positions (no change in salary) and 35 promoted into the new position (that included a 5% increase in salary). All applicants were required to go through the same two-step selection process, which included survey feedback from a random selection of their peers and a one-hour interview with a panel of RNs, nursing assistants, unit secretaries, nursing unit directors, and administrative staff (secretaries in the nursing units). The selection team used the new charge nurse job description to evaluate candidates.

The hospital then trained the successful candidates for their leadership roles. They had to undergo the health advisory board's training, called "Intensive Leadership for Front-Line Nurse Leaders," in which each new charge nurse was assigned a coach to work on a topic of his/her choice for practicum presentations; for example, answering call lights in a timelier manner. The presentations took place in November 2004 and March 2005. The nursing department held monthly forums starting in January 2005 on selected topics.

The nursing department also decided to use care extenders—volunteers—to help support the nurses. The volunteers were usually university nursing students and were required to come in four-hour shifts to help answer call lights and to triage patient requests. They also conducted the hospital's own patient experience survey, asking patients questions about their hospital experience. In tight financial times, using volunteers has proved to be extremely beneficial.

The goals of improving various aspects of the hospital such as quality, safety, finances, and patient and staff experience were explicitly stated in the job descriptions and performance evaluations that were completed in October 2004. The hospital implemented standards for nurse/patient interactions using the newly developed general care guidelines, and developed evidence-based guidelines as a means to improve nurse/patient interactions which could then be used for nursing evaluations.

In addition, the hospital increased staff accountability by tracking scores on its own QI survey. The hospital's proprietary survey included several service-oriented questions that

doctors, residents, and nurses were expected to ask of patients. The second iteration of the survey included another question to be asked of patients by doctors, residents, and nurses: “What is the most important thing we can do for you today?”

The hospital also increased staff accountability by tracking the annual unit QI service goals. Every year in July, the hospital set an overall organizational goal, and each unit set its own departmental goals. During the emotional support initiative, the units’ goals were focused on service.

The Committee to Help Optimize Patient Experience instigated executive management “rounds;” i.e., it requires hospital executives periodically to walk around the patient units to meet with staff, model standards of care, increase staff accountability, and gain first-hand knowledge of the hospital’s front-line operations. Senior managers were also required to document any complaints or issues raised, and they would be followed up on.

### **Improved Communications with Patients**

The hospital continued to review and act on patient comments from the PHS, its own QI survey, and the patient complaints file. It also identified several key tasks to improve communication and provide emotional support to patients.

- Require nurses to spend five minutes a day talking with each patient and to document their conversations on daily forms.
- Mandate new uniforms for nursing assistants to differentiate them from registered nurses and give patients a better understanding of who the staff are and what services they provide
- Increase accountability for service behaviors by tracking scores on the proprietary QI survey and tracking the annual unit QI service goals.
- Review and act on patient complaints or patient comments on the PHS, the hospital’s own QI survey, and patient complaints file
- Develop patient-information brochures for each hospital unit

### **Provided Support for Staff**

The hospital identified several ways to improve support to its nursing staff. First, it trained the new charge nurses for their new leadership positions. Second, it provided individual coaching to increase the skills of nursing unit directors through the emotional intelligence study (a research project where psychologists are used as coaches). Two sessions were provided for all nursing unit directors. In general, staff members reported that they enjoyed the sessions and some indicated that they had learned new ways of dealing with difficult situations.

The hospital also continued to provide courses on self-care for nurses. Several courses were offered through the Department of Nursing including: (1) the circle of caring, (2) dealing with difficult patient/families, and (3) the ethics of caring (a three-day weekend retreat). Some programs were also offered to hospital staff members including therapeutic communications, transference and counter transference (in which providers were encouraged to express their feelings and interact with instructors), and yoga. Moreover,

massage therapy was also sometimes made available to the nursing staff. Currently, these self-care courses and programs are ongoing.

By the middle of 2005, a multi-faceted set of actions had been implemented. The expectation was that the hospital's and nursing department's increased focus on emotional support would lead to more positive feedback from patients on their hospital experience.

### **Environmental Factors that Affected QI Effort**

At the time of the QI initiative, the hospital was in the midst of substantial changes due to (1) cost reductions to correct its negative financial performance and in particular the changes made to the roles and work hours of nursing assistants that were announced in June 2005. Financial cutbacks hurt nursing morale and limited the hospital's capacity to work on QI; and (2) the assessment undertaken to qualify the hospital for a "magnet designation," an honor given by the American Nurses Credential Center to healthcare organizations that demonstrate excellence in nursing practice and adherence to national standards for the organization and delivery of nursing services. Overall, external factors took valuable time and had significant impact on the QI initiatives and the emotional support nurses were able to offer patients. Some of the other environmental factors are described below.

#### ***Budget cuts in nursing affected staff morale and service***

Budget issues were taking leaders' time away from the emotional support initiatives. For example, in 2005 the nursing department was ordered to cut 100 full-time equivalent jobs (FTEs). Staff morale was already low. Nursing assistants were being asked to do eight-hour shifts instead of 12-hour shifts. With 12-hour shifts, they had worked more hours per day but fewer days per week and many worked a second job on days off. Administrative support (secretaries in the nursing units) was also cut back half an hour per day. Overall, this made a noticeable impact on the amount of time nurses spent on QI initiatives because of the increased workload. To compensate, the hospital expected to recruit more volunteers as care extenders to supplement the nursing staff.

Beginning in mid July (2005), new nursing assistant positions were introduced. They included clinical nursing assistants, administrative nursing assistants, and positions that combined both clinical and administrative duties. Four hundred positions/shifts were made available and each person was asked to indicate his/her top five choices. The assignment to each position/shift was determined by seniority. As a result, some nursing assistants were forced to leave their original nursing units unwillingly.

However, while the new model was being implemented, the hospital was confronted with unforeseen nursing assistant shortages. The hospital had offered severance packages to nursing assistants who wanted to leave and 50 accepted the offer. Most were clinical nursing assistants and as a result the hospital ran short of clinical nursing assistants and was therefore forced to advertise new openings for 50 to 60 combination positions. Some nursing assistants who had initially taken the severance pay (two months of salary) were rehired to fill the gaps. After settling in, these nursing assistants were allowed to make mutually agreeable switches in positions among themselves, and there was a lot of switching.

### ***Budget cuts negatively affected ancillary services***

Because of staffing cuts in ancillary units (pharmacy, equipment, and supplies), nurses indicated that they could not get medications or equipment promptly and often had to spend time on the phone chasing them or get the supplies themselves. They still addressed patient needs but were unable to give direct attention to their patients. Similarly, cutting back on nursing assistant hours and staffing meant nurses had less time to provide emotional support to patients.

### ***Budget cuts lead to patient comment/feedback processing delays***

Patient complaints identified by PHS and communicated to the nursing unit directors were usually not timely enough to be actionable. The delays were aggravated by the laying off of the staff person in charge of compiling the service alerts (from the patient relations department), resulting in further delays.

### ***A new discharge system was introduced to improve throughput***

A computer-based system was designed to streamline the process for discharging a patient, escorting him/her to the area where discharged patients are picked up by family/friends, and preparing that patient's room for a new patient. The goal was to improve "throughput," the process of cycling patients through the process from admitting to discharge. Under the old discharge system, the patient's nurse physically escorted him/her to where the patient was picked up to be taken home. Then the nurse called housekeeping to clean the patient's room, and did not pick up a new patient from the admitting department until after he or she had called housekeeping. Under the new system, nurses request an escort on the computer, and punch a code on the telephone when they arrive in the room to automatically notify housekeeping. After the room is cleaned, the housekeeper dials another code on the telephone signifying that the room is ready, thereby expediting the whole process.

The system was up and running everywhere in the hospital as of August 2005. It appeared to get patients out quickly and was reported to be very user friendly. One of the QI staff believed it would definitely improve staff satisfaction. However, morale was low among hospital staff and the motivation for housekeeping to improve throughput was minimal.

### ***Computer system implementation required adjustments in workflow***

A new computer system was adopted by the hospital to speed up the previously time-consuming process of maintaining patient charts. By August 2005, the neonatal intensive care unit (NICU) was the only place without the system due to space constraints. To the surprise of the QI team, implementation went smoothly, although it took time for the nursing staff to get used to the new system.

### ***Walkouts and strikes added uncertainty***

During this time, the hospital's contract with the clinical nurse's association (the union) expired and needed to be renegotiated. The union threatened strike action, demanding a salary increase and more educational opportunities for nurses. Secretaries and facilities personnel were also planning a walkout. Negotiations dragged on for months before the disputes were settled.

## **Initial Results of Implementing the Action Plan**

By the middle of 2005, the hospital had implemented its improvement strategy. The expectation was that the hospital's and the nursing department's increased focus on emotional support would lead to more positive feedback from patients. There had been minor setbacks in the initial timeline due to threats of nursing strikes and pressures for the nursing leadership to focus on budget cuts. However, the new charge nurse position produced immediate results in that the number of patient complaints dropped in those units where a charge nurse was present.

In this changing environment, the nursing assistants reacted more negatively to their new uniforms than nursing leadership expected; however, the decision was made to keep the uniforms and press on with the other changes.

It is a common in QI initiatives for there to be tension between "staying the course" and "making mid term corrections". This leadership dilemma is often driven by the context of the time and the culture of the organization. In this case, the Chief Nursing Officer chose to "stay the course" because of several reasons. She was intent on figuring out a way to distinguish the nursing assistants from the RNs. Patients not being able to distinguish the types of nursing staff clearly was both a communication issue and a safety issue. Prior to the Emotional Support initiative, the nursing department had tried several other avenues to distinguish between the nursing roles, all with little success. They had tried name tags with their titles. They had tried other forms of patient education around nursing roles. None of them had been successful. In addition to this, the CNO knew that their move to a new hospital building was imminent and that the future appearance of the nurses would need to be aligned with the new clean modern appearance of the new hospital building. The longer term plan was eventually at the new hospital to have all nursing staff wear uniforms. In addition, the CNO felt that she had allowed for nurse input into the uniform selection process, which had included several meetings and the nurses themselves had voted on the material and the color of the uniforms. Overall, all of the factors led the CNO to stay the course because the change was too important of a step in the overall change in culture that was needed at the hospital.

## **STEP 5: ASSESS PROGRESS IN ACHIEVING GOALS AND REFINE THE ACTION PLAN**

Over the course of the QI intervention, the hospital assessed its performance measures and compared them to the performance goals. Once the results were obtained and analyzed, performance issues were discussed within the Committee to Help Optimize Patient Experience and with executive leadership, and additional suggestions for improvements were made and implemented. The hospital had additional feedback based on interviews with hospital leadership, site visits, and separate focus groups with recently discharged adult patients and with nurses.

### **Feedback**

- Nursing staff appeared to not know that their roles and performance expectations had changed.
- Most groups had a positive attitude about, and high expectations for, the new charge nurse position. They saw the potential impacts to be:
  - Improved processes for consistency and continuity of care
  - Better understanding by nurses of who to go to with problems
  - Greater ownership of problems and solutions
  - Improved hand-offs between the day and night shifts
  - Improved peace of mind and confidence by patients in their nursing care
- The specific functions and responsibilities of the new charge nurse position were not made fully operational. More work was needed, and quickly, to make the charge nurse role come to life before the initial momentum of the change was lost.
- Several issues were identified related to the fact that volunteers conduct the hospital's proprietary surveys; all staff groups articulated the need for volunteer training.
- It appeared that staff were asking patients the emotional support-related questions measured by the hospital's own QI survey.
- Nursing unit directors did not appear to be sharing the findings from the hospital's QI surveys with nurses (for example, whether or not staff are offering emotional support to patients). Some reported that they do not trust the survey information and so are disinclined to share it.
- The executive management rounds were well received
- Nurses suggested that to improve patient care, the hospital needed to address the staffing overload of both nurses and ancillary units (pharmacy, equipment, and supplies).
- Nursing unit directors indicated that to improve patient care the hospital needed to reduce the amount of time nurses spend on maintaining patient charts, completing discharge/admission paperwork, and working the system to obtain needed supplies. The nursing unit directors pointed to the need for quicker pharmacy processing, more efficient environmental operations (i.e., cleaning of rooms as patients transfer out and new patients are admitted), and the integration of information technology.



- Patients indicated that to improve care, the hospital needed to address environmental issues (i.e., noise control, food delivery, and general cleanliness) and improve communications (language skills, and frequency and content of information) between staff members and patients.

In addition, the hospital discovered issues that applied to the initiative as a whole. Several barriers to making changes in care processes were identified in the interviews:

- The Human Resources department tends to discourage making some types of necessary personnel changes (e.g., firing people who are not performing).
- The administrative staff (secretaries) on the nursing units were not included in QI, which could lead to an undoing of some of the positive changes brought about by the nurses.
- There is little evidence of other departments being interested in improving coordination of care and emotional support.
- Although some patient demands may be excessive, many are appropriate and serve to ensure that patients are receiving effective and safe care. Therefore, nursing staff should strive to respect and work with these expectations, identifying the valid issues identified by patients, and responding to them as appropriate.

The activities in the emotional support initiatives established an infrastructure, but did not constitute a full strategy. To establish such a strategy, the hospital needed a set of appropriate goals administered by a management that saw the initiative as a priority. In general, the management and staff demonstrated a very positive attitude, and were open to the changes being pursued. Thus, the hospital was well positioned and expected to move forward expeditiously and eventually be successful in making the desired changes.

### **The Hospital Made Changes to the QI Initiative**

The hospital revised the new job descriptions and performance evaluations so they were based on the standards in the new general care guidelines and evidence-based guidelines for patient interactions; developed a new job description and performance evaluation for the nursing unit directors using the same approach; and addressed the new aspects of the job descriptions and performance expectations clearly in the orientations for new staff and in training at all levels.

The hospital also strengthened support for the new charge nurse positions and ensured that expectations would be consistent among all units by providing guidance to unit directors as to what the role of the new charge nurses should be. The hospital also: provided training for the new charge nurses which described roles and expectations for performance; improved strategies to retain the new charge nurses after they were mentored and gained some experience (many nurses left for better-paying jobs in other hospitals); provided informal learning opportunities, meetings, or workshops where new charge nurses could learn from each other; and assessed which nursing processes and practices were standard among all units and considered standardizing other efficiency-producing practices.

The hospital also refined the way that it uses its own QI survey to increase accountability for staff behaviors that improve emotional support to patients. It developed a question-and-answer document about the survey to reinforce the importance of offering emotional support to patients and the hospital's intent to measure and hold staff accountable for service-related behaviors. It also developed written procedures for conducting the survey and using the survey data for improvement. It determined if student nurse volunteers were asking patients the questions in the same way they were stated in the survey and conducted focus groups with patients to determine if the questions were understood by patients in the same way that the survey designers intended them. Lastly, it expanded training for the student nurse volunteers.

Lastly, the hospital expanded on the executive management rounds. It communicated to the nurses in more detail the purpose and goals of the executive management rounds and executives performed the rounds regularly and visibly; executive management reported to the nursing unit leadership the findings of their rounds and any follow-up actions recommended. This information was then shared with staff.

### **Analysis of the Data**

By the end of 2005, the executive leadership and quality improvement committee agreed that actions implemented in late 2004 and in 2005 should have improved the level of emotional support delivered to patients by nursing staff. Twelve quarters of data (July 2003—June 2006) were analyzed for the hospital as a whole and for individual units so that the hospital could understand the trends and fluctuations in the hospital's patient experience data. The full-scale intervention started in November 2004 and was completed in June 2005. An assessment was made of the effects of the hospital's QI efforts on global ratings of the hospital, nurse, and doctors, the PHS emotional support and other composite scores, and individual nursing item scores for the PHS and the hospital's customized items. The significance of differences in scores before and after the intervention was evaluated as well as the overall trends. There are approximately 600 to 920 completed patient surveys out of the several thousand sent out in a given quarter with 11 nursing units ranging in size from 25 to 75. There are two types of nursing units: medical and surgical. Five of the hospital's nursing units are medical, four are surgical, and two are mixed.

The global rating items are:

- Overall, how would you rate the nursing care you received?
- Overall, how would you rate the care you received at the hospital?
- Would you recommend this hospital to your friends and family?

The set of six emotional support items are:

- If you had any anxieties and fears about your condition or treatment, did a doctor discuss them with you?
- Did you have confidence and trust in the doctors treating you?
- If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?
- Did you have confidence and trust in the nurses treating you?

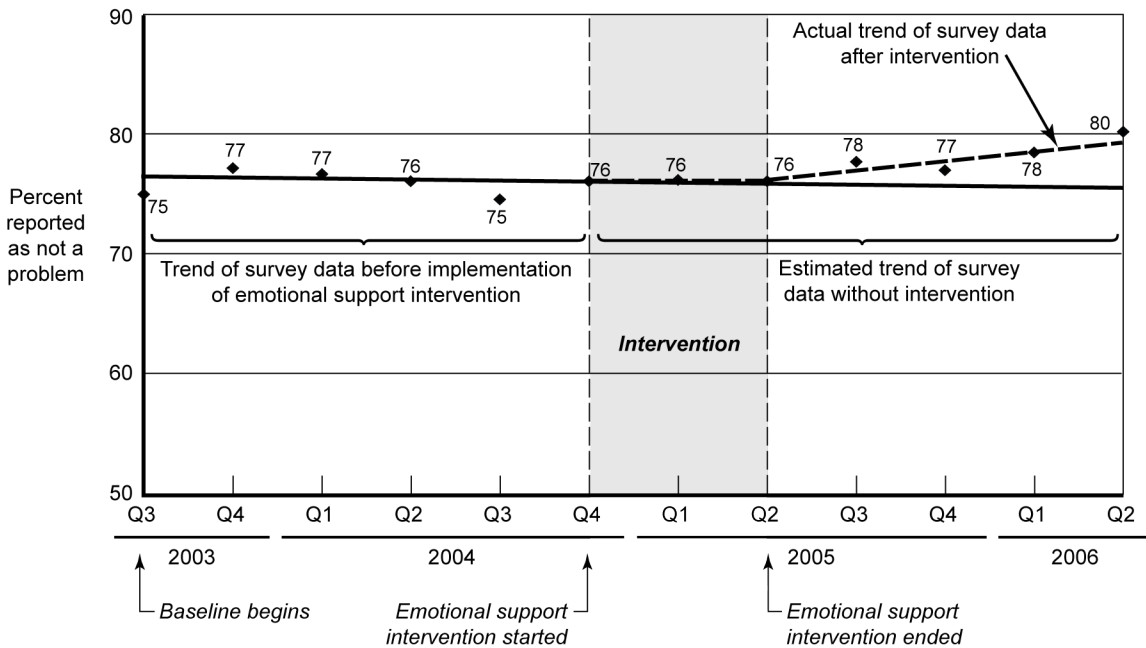
- Was it easy for you to find someone on the hospital staff to talk to about your concerns?
- Did you get as much help as you wanted from someone on the hospital staff in figuring out how to pay your hospital bill?

However, two of the items were considered most closely linked to the QI initiative: “If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?” and “Did you have confidence and trust in the nurses treating you?”

In the second quarter of 2006, the executive leadership of the hospital agreed that the actions implemented in late 2004 and early 2005 had improved at least one aspect of emotional support delivered to patients by nursing staff—nurses were more likely to discuss a patient’s anxieties and fears with the patient. The measure of confidence and trust in nurses showed no clear gains. They had also begun to hear positive anecdotal evidence from patients about nursing care.

Figure 2 shows the progress of survey data from the third quarter of 2003 to the second quarter of 2006 for the measure of “If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?” The Figure is divided into three time periods. The first shows the baseline data values prior to any implementation of the emotional support improvement strategies. The middle period depicts the implementation period. The top dotted line shows actual data values as emotional support improved during implementation. The bottom solid line is an estimate of what the survey data would have shown if the data trend reported prior to the implementation had continued. The third period shows post-implementation trends for both the actual observed data values (the top dotted line) and the continuation of the extended baseline trend (the bottom solid line). An increasing number of patients over time reported not having a problem talking to their nurses about their anxieties and fears, which indicates improvement.

**Figure 2. Data reflects improvement: Patients reported that nurses discussed patients' anxieties and fears with patients**



A8775-1-b 02/2010

A comparative analysis of the projected baseline trend data and post-intervention trend data from Q4 2004 to Q2 2006 was conducted on all six of the following aspects of emotional support (two of which are provided by nurses):

- If you had any anxieties and fears about your condition or treatment, did a doctor discuss them with you?
- Did you have confidence and trust in the doctors treating you?
- If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?
- Did you have confidence and trust in the nurses treating you?
- Was it easy for you to find someone on the hospital staff to talk to about your concerns?
- Did you get as much help as you wanted from someone on the hospital staff in figuring out how to pay your hospital bill?

However, two of the items and their comparative analyses were considered most important since they were most closely linked to the QI initiative: “If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?” and “Did you have confidence and trust in the nurses treating you?”

In the case of nurses discussing patient’s anxieties and fears with patients, a statistical difference was found between the projected baseline trend data (the bottom solid line in Figure 2) and the actual post-intervention trend data (the top dotted line) – indicating significant improvement. Reviewing Figure 2, this improvement first became significant a full year after the start of the implementation process. Improvements definitely take time especially in large complex environments.

The trends for all the other aspects of emotional support, including the one other aspect of emotional support provided by nurses--i.e. confidence and trust in nurses--were found to be flat; i.e., no difference was detected between the projected baseline trend and the post-intervention trend.

This statistical difference in scores from 76 to 80 was also considered practically relevant by hospital leadership because the changes were consistent over time and also in the correct direction. This consistent upward shift in scores overtime was a signal to the hospital that they were on the correct path and it was a direct effect of their efforts to improve the patient experience, which they believed, would preserve their market share – present and future. The hospital leadership also understood how hard it is hard to move patient experience scores, so consistent movement overtime in the correct direction was considered a success, even though they recognized there was still more to be done to *sustain* the improvements.

The improvement in the patient experience scores represented to the hospital leadership a stabilized reputation of the hospital in the community and having the reputation backed by numbers and data. The hospital leadership believed that the stabilized reputation added directly to their preservation of patient volume.

Besides refining the improvement strategies, the hospital leadership decided to include the patient experience data in the hospital's "score card." As of 2005, the hospital measured its performance in five major areas (operations, finances, quality, patient experience, and hospital workforce) and reported them together as a score card. For each of these measures, the hospital set a monthly target and an annual target. Prior to 2005, the hospital had monitored these measures, but had not reviewed them together to gain a picture of hospital performance as a whole.

## **STEP 6: MONITOR IMPROVEMENTS TO MAKE SURE THEY STICK**

To monitor its progress, the QI team frequently assessed the implementation process by checking with team members to make sure that the initiatives were on track and moving forward as planned in their own service/units. The hospital began to prepare for events that might compromise these gains as it looked forward to the move to the new hospital facility. For example, the hospital knew that as nursing staff left, it would need to reinforce with newly hired nurses the importance of service-oriented patient interaction. As a result, a focused discussion of patient-centered care was added to new-staff orientation.

Progress was documented and tracked quarterly using the continuity and transition PHS dimension as well as the four individual PHS items. In addition, the hospital's PHS scores were benchmarked and compared to other hospitals. However, the team did not re-evaluate the data or make changes to bolster or redirect the interventions or the action plan.

The Hospital Executive Committee remained committed to QI and set out to pursue several additional QI projects using the CAHPS data. This recommitment by executive leadership to QI and patient experience data also elevated its importance and priority among mid-level managers of the hospital.

The hospital continued to monitor the success of its QI activities as indicated by scores on the hospital score card (and, of course, by comparative survey data). The score card provided high level data for a broad look at the main aspects of care.

The areas in the score card include:

- Operational data
  - Average length of stay
  - Average daily census
  - Cost/adjusted discharge (\$)
  - Total surgeries
  - The ratio of full time equivalent employees to average occupied beds
  - Supply cost/discharge
  - Discharge percentage prior to noon
  - Total discharges
  
- Financial data
  - Operating margin (percent)
  - Days cash in hand
  - Days in accounts receivable
  - Payor mix (percent contract days)
  - Medicare case mix index

- Quality data
  - Fall rate
  - Central line infections
  - Antibiotics started for pneumonia
  - Antibiotics started for surgery
  - Medical errors
  - Death within three days following an operating room procedure
  - Patients readmitted to hospital within two days of the time they were discharged from the emergency department and sent home
- Patient experience data
  - Staff introductions
  - Providing emotional support to patients/families
  - Patient experience with the discharge process
  - Would recommend the hospital to friends and family
  - Number of medical doctor referrals to hospital specialists
- Hospital workforce data
  - Vacancy rate
  - Workplace injuries
  - On-time appraisals
  - Turnover rate
  - Absentee rate

For each of these measures the hospital has set a monthly target and an annual goal. They are continuing to track these measures overtime.

The hospital leadership also acknowledged that they have benefited greatly from being an earlier adopter of H-CAHPS because of the continued push for pay for performance. When the Emotional Support initiative started, there was talk of pay for performance metrics for hospitals. Given that the hospital leadership had adopted H-CAHPS early, the hospital was able to stay ahead of the curve in terms of focusing on the hospital's performance on patient experience scores and able to identify the hospital's areas of weakness. Being able to be prepared for the pay for performance push allowed the hospital to take advantage of the P4P system financially and have a more immediate and direct effect on revenue from the CMS P4P program to the hospital.

The hospital worked to maintain the improvements it had made in the emotional support provided by nurses seen in the performance gains in the first year after completion of the intervention. But it is too early to conclude whether the gains are sustainable.

## **LOOKING AHEAD WITH THE CASE STUDY HOSPITAL**

At the end of the hospital's QI initiative and CAHPS demonstration project, the emotional support offered to patients improved dramatically, and the hospital reached its goals of improving patient care, the patient experience, and the hospital's competitiveness. However, QI is ongoing.

Among the lessons to be learned from the hospital's experiences are: Continuously monitor indicators such as CAHPS and proprietary surveys. Once performance goals have been reached in the short term, it is important to continue monitoring the improvements to make sure they are sustained over time. Also try to anticipate events in the future that could compromise customer service or otherwise threaten gains. As the competitive and regulatory environments continue to change, the health plan in this case study continues to develop new QI projects to stay abreast of the issues.