**Coordination of Care**

# Making the Transition to Nursing Bedside Shift Reports

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Effective communication during a patient handoff is critical in ensuring patient-care quality and safety. Barriers to and problems associated with patient handoffs have been widely noted.[1–5] A recent review highlights the variety of purposes and types of patient care handoffs.[6] For hospitalized patients, shift handoffs between the offgoing and oncoming nurses, as represented in nurse shift reports, must include all critical information about a patient's plan of care for the next few hours. This information must be well communicated, not only between nurses and physicians but also to the patient. There has been growing interest in nurse shift-to-shift reports, with evidence of a return to the once-standard practice of handoffs being made at a patient's bedside.[7–11] Bedside shift reports have been found to increase patient involvement and satisfaction,[12] boost nursing teamwork and accountability,[13] and improve the effectiveness of communication among caregivers.[14]

In a recent systematic review of nursing shift report practices, Reisenberg et al. noted a lack of research on the most effective process for conducting a structured shift report.[15] A growing body of literature has described in varying detail the experiences and strategies used in the transition to bedside shift reports.[12,16–20] For example, shift change for nurses was redefined in 2004 at Kaiser Permanente when nurses and the organization's innovation consultancy group codesigned a system, Nurse Knowledge Exchange (NKE), to bring nurses to the bedside for shift change.

Few studies have provided the longitudinal results of the transition to bedside shift reports, and most of the data concern relatively short follow-up periods. For example, Chaboyer et al. found that six months after implementation, 44% of the 27 nurses responding stated that they believed that the shift reports improved patient safety and that they improved patient outcomes through discharge planning.[9] Laws and Amato found that four months after implementation, nurses were more likely to agree that bedside reports improved safety but were also more likely to believe it violated confidentiality and took just as long as previous reports.[17]

## Article-at-a-Glance

**Background:** For hospitalized patients, shift handoffs between the offgoing and oncoming nurses, as represented in nurse shift reports, must include all critical information about a patient's plan of care, and that information must be well communicated. Few studies have provided the longitudinal results of the transition to bedside shift reports, and most of the data concern relatively short follow-up periods. A 20-bed inpatient nursing unit in a Midwestern academic health center made the transition to conducting nursing shift reports at the patient's bedside.

**Methods:** Preparatory work for designing the bedside shift report process, which began in February 2009, included examining baseline patient satisfaction scores, reviewing the existing shift report processes, and identifying potential barriers and facilitators in moving to bedside shift reports. Unitwide implementation of the new bedside shift report process began in June 2009. In the redesigned process, offgoing nurses were required to ask patients to write down any questions they would like to ask during the shift report.

**Results:** For the first six months following implementation of bedside shift reports, there were significant increases in six nurse-specific patient satisfaction scores (scores increased at least 8.7 points, and percentile rankings increased from the 20th to > the 90th percentile when compared with similar nursing units in peer institutions). Longer-term results reflected subsequent declines and substantial month-to-month variation.

**Conclusions:** Although the transition to bedside shift reports met with some resistance, the transition was made smoother by extensive planning, training, and gradual implementation. On the basis of this pilot study, the decision was made to adopt bedside shift reports in all inpatient nursing units in each of the system's five hospitals.

**Table 1. Summary of Major Elements of the Pilot Unit's Implementation Plan for Making the Transition to Nursing Bedside Shift Reports, 2009**

| | Implementation Tasks |
|---|---|
| April | Gained approval from Unit Nursing Shared Governance Council to try bedside shift reports. |
| May 5–May 15 | Identified super users; provided articles, 21-point standard report template,* and instruction by supervisors and unit educator. |
| June 1–June 21 | Super users conduct limited trial of bedside shift reports.<br>Modified and continued evaluating changes to the report structure and process on the basis of limited trial results |
| June 17–June 19 | Held comprehensive staff meetings to inform each staff member of his or her role in the report and to address concerns; conducted staff training of new shift report process using presentations, videos, and role playing. Locally produced training videos addressed the following:<br>■ What about the "not so prepared" nurse?<br>■ What about the nurse not familiar with bedside reports?<br>■ What about the "interruptive" patient?<br>■ "I don't want to say _____ in front of the patient"<br>■ What if the patient/family have questions? |
| June 22 | Started unitwide implementation @ 7.00 A.M. Night-shift nurses gave verbal report to oncoming day-shift nurses. |
| June 22–July 5 | Followed up by unit educator and supervisors on a daily basis to support implementation |
| Monthly | Continuously provided patient satisfaction scores to all unit staff |

* Sidebar 1, page 248.

In an effort to improve patient satisfaction regarding nursing-specific indicators, an inpatient nursing unit in a Midwestern academic health center made the decision to make the transition to conducting nursing shift reports at the patient's bedside. This transition required an extensive redesign of the current process, training of all nursing staff, and pre-post measures of success, as described in this article. The unit's experience subsequently served as the basis for an institutionwide implementation.

## Methods

### Study Site

This study was conducted as a pilot study in an inpatient step-down nursing unit in a Midwestern academic health center. This open, nonintensivist-managed unit consists of private rooms for adult medicine and surgical patients. The unit has 20 staffed beds, an average daily census of 16.8, 84% occupancy, lengths of stay of 3.9 days, and a typical patient-to-nurse ratio of 3:1. Patients are typically admitted by cardiology, internal medicine, and trauma and general surgery services. The unit uses a primary or "total patient care" style of nursing delivered by an average of 32 full-time equivalents (FTEs) of registered nursing staff (RNs). Approximately 48% of nursing staff were BSN (1 MSN) prepared at the time of this initiative, of whom 11% held advanced certification in their progressive care specialty.

### Study Timeline: February 2009–May 2011

Preparatory work for designing the bedside shift report process, which began in February 2009, included examining baseline patient satisfaction scores, reviewing the existing shift report processes, and identifying potential barriers and facilitators in moving to bedside shift reports. Pilot testing of a prototype nursing bedside shift report occurred in May 2009, which was followed by a modest redesign and education of nursing staff about how to conduct bedside shift reports. As shown in Table 1 (above), unitwide implementation of the new bedside shift report process began in June 2009.

### Data Collection and Analysis

Because a change to bedside nurse shift handoffs was part of the institution's move to make its care processes more patient centered, our primary outcome of interest was change in selected patient satisfaction scores. However, because both patients and nurses were key stakeholder groups affected by this change, it was essential to collect data from the nurses to understand how they viewed the change. For nurses, a primary motivation for switching to bedside shift reports was the consistently low level of patient satisfaction scores on a number of nursing-specific indicators—Friendliness/Courtesy of the Nurses, Promptness in Response to Call Light, Nurses' Attitude Towards Requests, Attention to Special/Personal Needs, Nurses Kept Patient

Table 2. Bedside Shift Report Patient Interview Summary (February–March 2011, $N = 43$)

| Interview Item | Response |
|---|---|
| Who is completing the survey? | Patient ($n$ = 31; 72%), Family/Friend ($n$ = 2; 5%), Both ($n$ = 5; 12%); Missing ($n$ = 5; 12%) |
| Did your nurse ask you to think of questions before the shift report occurred? | ($n$ = 39) Yes (82%) |
| Did your last nurse introduce you to your current nurse? | ($n$ = 42) Yes (95%) |
| Did managing up (efforts to increase confidence in your nurses) occur? | ($n$ = 19) Yes (79%) |
| Did the nurses allow you to ask questions during the shift report? | ($n$ = 38) Yes (97%) |
| Were your questions answered to your satisfaction? | ($n$ = 37) Yes (92%) |
| Did your nurses update your whiteboard during the exchange? | ($n$ = 42) Yes (86%) |
| Did you find the information on this board helpful? | ($n$ = 42) Yes (90%) |
| Did either of your nurses discuss your goal for today with you? | ($n$ = 37) Yes (62%) |
| To what extent did you feel involved in the shift report communications? | ($n$ = 41) Very Much (46%), Quite a Bit (24%), Somewhat (12%), Very Little (12%), Not at All (5%) |
| How satisfied were you with this most recent shift report? | ($n$ = 39) Very Satisfied (72%), Satisfied (26%), Dissatisfied (3%) |

Informed, and Skill of the Nurse. Pre- and postimplementation levels of patient satisfaction with these indicators were measured with a patient satisfaction survey instrument.[21]

In data analysis, we conducted (1) internal longitudinal tracking on the basis of changes in mean responses to specific satisfaction questions and (2) longitudinal comparisons to an external benchmark (data for other hospitals on the survey instrument) of similar inpatient nursing units from similar institutions. We did this because we were interested in understanding both the extent of change we created internally and how we compared to similar nursing units in other hospitals. Patient perceptions of the bedside shift report process were subsequently collected through the use of structured interviews (Table 2, above).

From nurses we collected information about the pre- and postimplementation (nursing shift report processes, their perceptions about the shift report processes, and issues they found more difficult to address when at the patients' bedsides).

## Implementation Planning

As a major change in nursing practice, the transition to nursing bedside shift reports required a carefully developed implementation plan. The implementation plan was formed by examining the existing shift report process, surveying and talking with staff, developing a conceptual model for change, identifying potential barriers and facilitators, and pilot testing.

***Analysis and Survey of the Existing Shift Report Process.*** The hospital had a traditional shift report practice of a 30-minute overlap period during which both offgoing and oncoming nurses were on duty. A flowchart of the existing nurse shift report process was developed, validated, and analyzed. To supplement the flowchart, data were collected from staff nurses for 30 individual oncoming and 30 individual offgoing shift reports. To collect the data, we gave nurses a data sheet that listed the specific shift handoff report steps and asked them to record how much time it took them to do each step. On average, the offgoing nurses' shift report activities included about 6 minutes for updating informal paper-based notes related to patients' status and care plans which were not contained in the medical record), and about 11 minutes to tape-record the shift reports (not included was the amount of time spent looking for available tapes and tape recorders or finding a quiet place to record).

The oncoming nurse shift report typically began with a group meeting with the shift supervisor (4–5 minutes), reviewing the paper-based notes (Kardex) for his or her assigned patients, and finding and listening to tape-recorded messages from the offgoing nurse (13 minutes). After the oncoming nurse completed these tasks, he or she then needed to find the offgoing nurse, who took care of his or her assigned patients and spent about 7 minutes in face-to-face discussion for all patients to whom the incoming nurse was assigned. Depending on how patients were assigned, the oncoming nurse might have had to locate two or three offgoing nurses from whom to receive the reports. Patients would typically not have direct contact with either the offgoing or oncoming nurse for some time before, during, and after the existing shift report process.

In terms of the initial survey, 18 (56%) of the 32 unit nurses responded to questions about the then-current shift report process (Appendix 1, available in online article; 1 = "Strongly

**Driver Diagram of Relationship Between Bedside Handoffs and Goal to Improve Patient Satisfaction Scores**

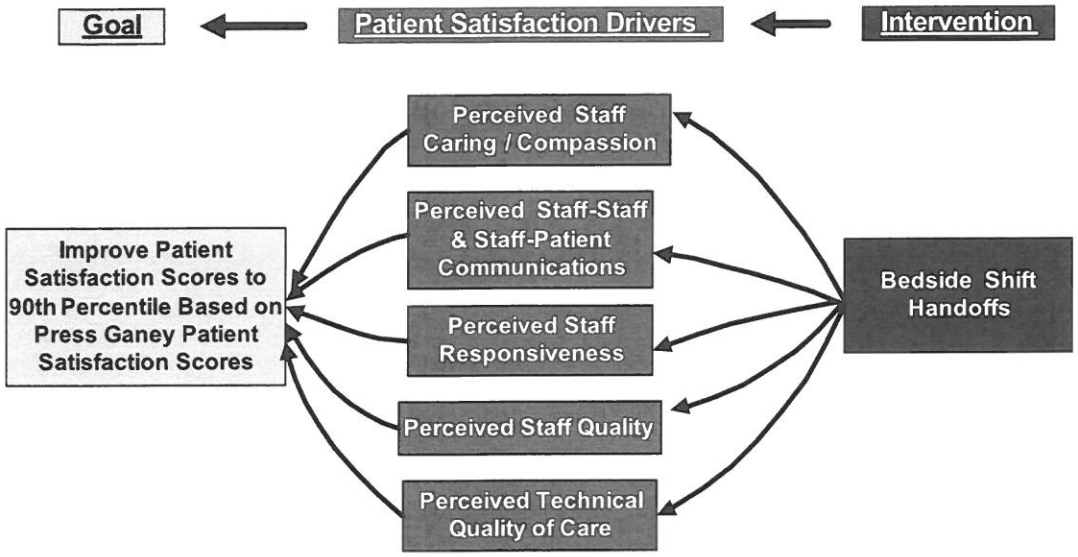


**Figure 1.** *The driver diagram was developed [by D.S.W., R.R.] for the pilot study to display the hypothesized effect of bedside shift reports on patient satisfaction.*

Disagree," 5 = "Strongly Agree"). For example, the nurses confirmed that the "change of shift report" was usually "worth my time" (mean = 4.1) but that reports rarely occurred at patients' bedsides (mean = 1.5).

***Conceptual Model for Change.*** A driver diagram (Figure 1, above) was developed to display the hypothesized effect of bedside shift reports on patient satisfaction. It was hypothesized that the switch to bedside shift reports would positively influence patients' perceptions of nursing staff caring and compassion, staff-to-staff and staff-to-patient communications, staff responsiveness to patient requests, staff quality, and technical quality of the care being provided. The goal was to improve patient satisfaction scores to at least the 90th percentile as compared with similar institutions using the same survey instrument.

***Redesigned Shift Report Process.*** Armed with an assessment of the existing shift report process and motivated by low patient satisfaction levels, the process was redesigned to have both the oncoming and offgoing nurses conducting most of the face-to-face shift report with the patient at the bedside (Figure 2, page 247). The redesigned process for oncoming nurses still included a brief overview of the upcoming shift by the shift supervisor and time to review the paper-based notes. For offgoing nurses, the requirement to update the paper-based notes remained unchanged. However, they were now required to contact their patients about 30 minutes before the shift report to ask them to write down any questions they would like to ask during the shift report. To facilitate this new end-of-shift handoff process, patients and family members, during the patient's admission to the nursing unit, were also informed about the revised handoff process and encouraged to use this time to ask about any issues of concern.

The bedside shift report process, which was designed to take approximately five minutes per patient, consisted of the steps shown in Table 3 (page 248). (Although the time was not systematically measured, five minutes turned out to be a good estimate, with variation from patient to patient.)

***Identified Barriers to and Facilitators of Change.*** Through the evaluation of the existing report process, talking with and surveying nursing staff, several potential barriers to and facilitators of changing to nursing shift report conducted at a patient's bedside were identified, as summarized in Sidebar 2 (page 249). These barriers and facilitators were similar to those noted in previous studies.[10,15,16]

***Implementation Plan.*** As shown in Table 1, the implementation plan included intensive individual and group communications, unit nursing shared governance buy-in, use of "super users" as champions, training and practice in conducting bedside shift reports under different scenarios, and ongoing sharing of the resulting patient satisfaction scores with the nurses—strategies for effective handoffs that Reisenberg et al. had noted.[15]

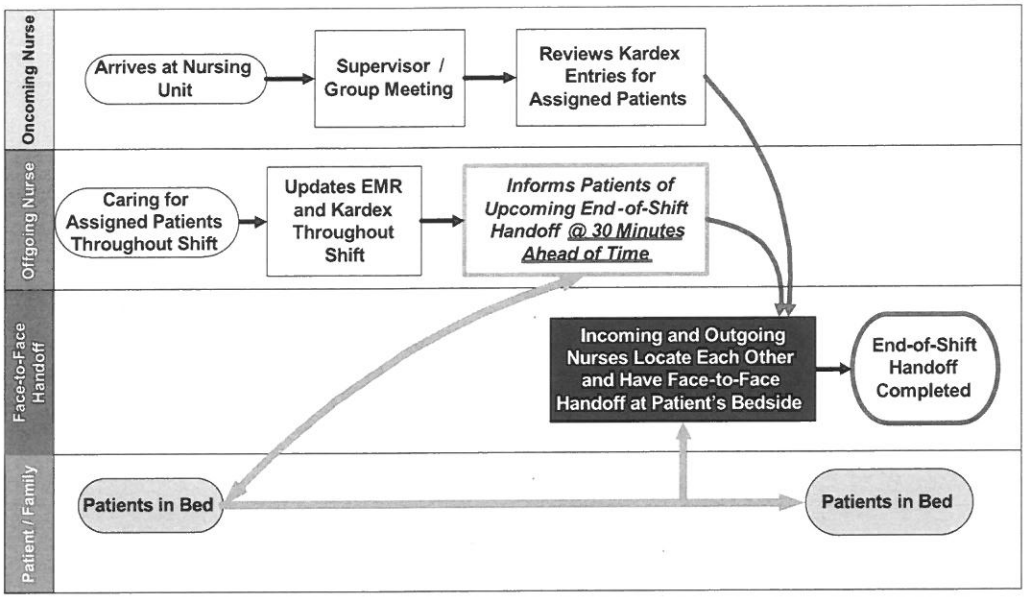


Figure 2. *The shift report process was redesigned to have the bulk of the shift report occur at the patient's bedside. EMR, electronic medical record; Kardex, paper-based patient notes.*

## Results

### Patient Satisfaction

Patient satisfaction results for 6 months before implementation of the bedside shift report and for 6 months and 23 months postimplementation period are presented in Figure 3 (mean patient response scores; page 250) and Figure 4 (percentile ranking when compared with similar inpatient units in peer institutions; page 250). The number of patient responses to the survey each month ranged from 8 to 20. The analysis of patient survey data was based on the month of the patient's discharge and not the month in which the surveys were received.

***Mean Patient Response Scores.*** For the first 6-month postimplementation data, the monthly patient satisfaction ratings for the individual items increased an average of 11.1 points (range, 8.7–14.0). For the entire 23-month follow-up period, there was less overall improvement, with an average increase of 6.9 points (range, 5.5–7.6). Finally, a review of patient satisfaction data for the postimplementation period January 2010–May 2011 indicated lower patient satisfaction scores relative to the first 6-month postimplementation period.

Further analysis of the postimplementation data revealed periodic, and sometimes substantial, month-to-month fluctuations. For example, the "Nurse's Friendliness and Courtesy" question in 17 of the 23 (74%) months follow-up period had mean scores of 90 or better. In three additional months (13%), the mean scores fell between the postimplementation average of 87.3 and 90, and in the remaining three months they were between 81 and 87.

***Mean Percentile Rankings.*** Similarly, for the percentile rankings for the first 6-month follow-up period, the percentile improvement for the six items averaged 67 points (range, 64–76 percentile points). All six items were above the 90th percentile. In contrast, for the entire 23-month postimplementation period, there was less, but still substantial improvement, by an average of 38 percentile points (range, 30.7–46.7) for the six items, which were all in the 65th-to-70th percentile range. Average rankings ranged between the 5th and 30th percentiles for 7 of the 23 months, the 70th and 89th percentiles for 5 months, and at ≥ 90th percentile for the remaining 11 months.

### Nursing Staff Satisfaction

***Postimplementation Follow-Up Survey—October 2009.*** We conducted postimplementation follow-up surveys with 23 unit nurses about the transition to bedside shift reports. We used a 5-point Likert-like scale asking nurses the extent to which they agreed (1 = "Strongly Disagree," 5 = "Strongly Agree") with several statements. As shown in Table 4 (page 251), for the first follow-up survey, there was overall agreement that bedside shift

**Table 3. Steps in the Redesigned Shift Report Process**

**Step 1. Engage the Patient**
- Ask patient about preference to have family members and/or visitors leave room during report.
- Introduce staff, patient, and family members.
- Increase patient confidence by "managing up" to let the patient know that "a great nurse" was going to be taking care of them.

**Step 2. Discuss Clinical Care Issues**
- Provide a 21-point clinical update (for example, patient information, laboratory results, wound care, medications).*
- Discuss care goals for next shift.

**Step 3. Facilitate Two-Way Communication**
- Answer patient's/family member's questions, address unresolved issues, and/or write down questions or issues to be addressed later in the shift or hospitalization.
- Update communications "whiteboard" in patient's room (for example, nurse's name, treatment goals, anticipated discharge date).

* Sidebar 1, right.

**Sidebar 1. 21-Point Nursing End-of-Shift Report Elements**

1. Name
2. Age
3. Service
4. Current diagnosis
5. Pertinent history
6. Allergies (food, drug, or other)
7. Neuro (pupils, pain, orientation)
8. Respiratory (oxygen, trach, treatments)
9. GI (diet, drains, last BM, assistance with feeding)
10. GU (voiding, foley, anuric)
11. Cardio (rhythm, murmur, pacer)
12. Skin skeletal system (dressings, splints, braces, traction, spine clear/log roll, HOB restrictions)
13. Procedures (tubes, drains, incisions)
14. Lab (pending or completed, abnormal, accu-checks)
15. IV access (peripheral or central)
16. IV drips (rate, access verified)
17. Psychosocial
18. Special needs (disability, lives in facility, fall precautions, restraints)
19. Teaching/special instructions
20. Family contact/issues
21. Dressings/wounds

* Neuro, neurologic; trach, tracheotomy; GI, gastrointestinal; BM, bowel movement; GU, gastrourinary; HOB, head of bed; lab, laboratory; accu-check, glucose meters; IV, intravenous.

reports "Improved Nurse to Nurse Communications" (mean = 4.3); "Improved Information Quality & Usefulness" (mean = 4.2); "Allows for Smoother Transition Experience for Patients" (mean = 4.0); and "Positively Received by Patients" (mean = 4.1). In addition, nurses tended to agree with the statement "I Prefer Shift Handoff at Bedside" (mean = 4.0). Although in a positive direction, there was slightly less agreement on items such as "Easier for Me to 'Come Up to Speed' on Patients Not Previously Cared for" (3.8). There was no clear universal agreement as to whether the bedside shift reports "Require More Time to Complete" (2.9) or with the statements "Difficult Communicating When There is 1+ Offgoing Nurses to Coordinate with" (3.3) and "Nurses on Unit Prefer Shift Handoff at Bedside" (3.3).

After tracking the changes and periodically providing reminders about the need for and value of bedside shift reports, we conducted a second follow-up survey in February 2011.

***Postimplementation Follow-Up Survey—February 2011.*** As shown in Table 4, there was little change in the mean scores between the first and second follow-up staff surveys. For only for one item, "Difficult Communicating When There is 1+ Offgoing Nurses to Coordinate with" was there a substantial change—from 3.3 to 2.5; the decrease toward the "disagree" end of the response scale meant that more nurses thought it was *not* difficult to communicate with more than one nurse. In addition, about 20% of respondents reported that shift reports were being conducted at patients' bedsides less than 60% of the time, about 13% reported bedside reports occurring between 60% and 70% of the time, and about 67% of respondents reported holding nurse bedside shift reports greater than 80% of the time (data not shown).

Finally, in an effort to further learning about respondents' comfort in discussing specific items at the patients' bedside, they were asked to use a 4-point (1 = "Very Uncomfortable," 4 = "Very Comfortable") response scale to rate 22 specific items. As shown in Figure 5 (page 252), the specific items for which there was the least comfort in discussing at the bedside were Pertinent History, Teaching, Special Needs, Family, and Psychosocial Issues. Given the particular discomfort associated with family dynamics and psychosocial issues, we modified bedside shift report training to include additional role playing and to encourage that these sensitive issues be addressed away from the bedside, as appropriate.

## Structured Patient Interviews

On the basis of the results of the second follow-up staff survey conducted in February 2011, we decided to obtain more specific information from patients about their most recent bed-

**Sidebar 2. Summary of Potential Barriers to and Facilitators of Changing to Nursing-Shift Report Conducted at a Patient's Bedside**

**Barriers**

- Nurses were comfortable with existing process.
- Existing process allowed for socialization time among the nurses, whereas new process reduced socialization time.
- Uncertainty about what to say and do during bedside shift report
- Concerns about discussing some patient issues in presence of patients, family members, or visitors
- Concern that oncoming nurse would become delayed or held up by a patient's questions and requests

**Facilitators**

- Low patient satisfaction
- Inconsistent information being communicated at shift reports
- Information gained during report assists oncoming nurse in prioritizing work for that shift.
- Increased patient/family caregiver interaction
- Increased time and frequency with which nurses interact with patients
- Agreement by the majority of nurses that bedside shift reports could improve the shift report process

side reports. We used a structured interview with 42 patients to ask them about their most recent bedside shift report between February and March 2011. Eighty-six percent of the interviews occurred within 2 hours of the night-to-day shift handoffs, typically conducted between 7:00 and 7:30 A.M. The survey focused on two general areas: The bedside report process as perceived by the patient and the patient's feelings about and satisfaction with the bedside report. As shown in Table 2, overall, patients were satisfied and appreciated the handoffs being done at the bedside. Yet none of the steps were reported to have occurred 100% of the time. Although the findings may reflect limitations in recall, the items with low percentages, such as the lowest-scoring "Did either of your nurses discuss your goal for today with you?" item, are of concern.

## Discussion

In this article, we have described a successful initial implementation, and somewhat less successful maintenance, of a nursing bedside shift report process in one nursing unit. Bedside shift reports, while improving patient satisfaction scores for nurse-sensitive indicators, were found to be generally, but not universally, well received by nurses. Feedback from both nurses and patients suggested that not all nurses were following the designed shift report process in a consistent manner.

On the basis of this pilot study, the decision was made in early spring 2011 to adopt bedside shift reports in all inpatient nursing units in each of the system's hospitals. In setting a new expectation for bedside end-of-shift reports as a standard of care, several components—Acknowledge, Introduce, Duration, Explanation and Thank You (A-I-D-E-T℠),[22] key words, managing up,[23] and use of whiteboards (as communication devices[24]) in patient rooms—have been used to standardize the report process and content. However, because of differences in the patient types being cared for on these units, differences in the nursing units' work cultures, and diversity of the care teams, the specific details of each unit's bedside shift report processes may vary. For example, in the ICUs, where each nurse cares for one to two patients, the shift reports tend to take longer and are also used for the oncoming nurse to verifying patency and integrity of infusing fluids and medications. On the pediatric unit, staff-parent conferences outside the patients' rooms were already being conducted, so that it would not be necessary to discuss some clinical issues directly at the patient's bedside.

A number of lessons were learned in the transition to bedside shift reports, as follows:

*1. Set meaningful and measurable goals.* The presence of a meaningful and measurable goal is important, as reflected in our efforts to engage staff in the decision to change the shift report process. Improving patient satisfaction is an institutional priority that is directly affected by the quality of the care provided by the frontline staff. The use of both mean scores, as well as percentile rankings for patient satisfaction, allowed for internal and external comparisons. If we had used only the mean patient satisfaction scores, most of which were in the 80% range, there may have been less willingness to change.

*2. Address potential facilitators and barriers.* It is important to understand the existing process and identify potential barriers and facilitators for change that can be used to design a new shift report process and develop an effective implementation plan. For example, because nurses were used to being able to socialize with one another during the shift report process, it was anticipated that there would be resistance to significantly reducing socialization time (Sidebar 2). To prospectively help address expected resistance to this change in the socialization pattern, we engaged the unit's Nursing Shared Governance Council, which reviewed the patient satisfaction data and then ultimately approved a move to bedside shift reports. Also, to help alleviate nurses' concerns about handling potentially difficult situations during the bedside shift report, we had a series of brief (five min-

**Nursing-Related Mean Patient Satisfaction Scores at Preintervention Baseline (January–June 2009) and Postimplementation in Nurse Shift Handoff Process for Selected Time Periods (July 2009–May 2011)**

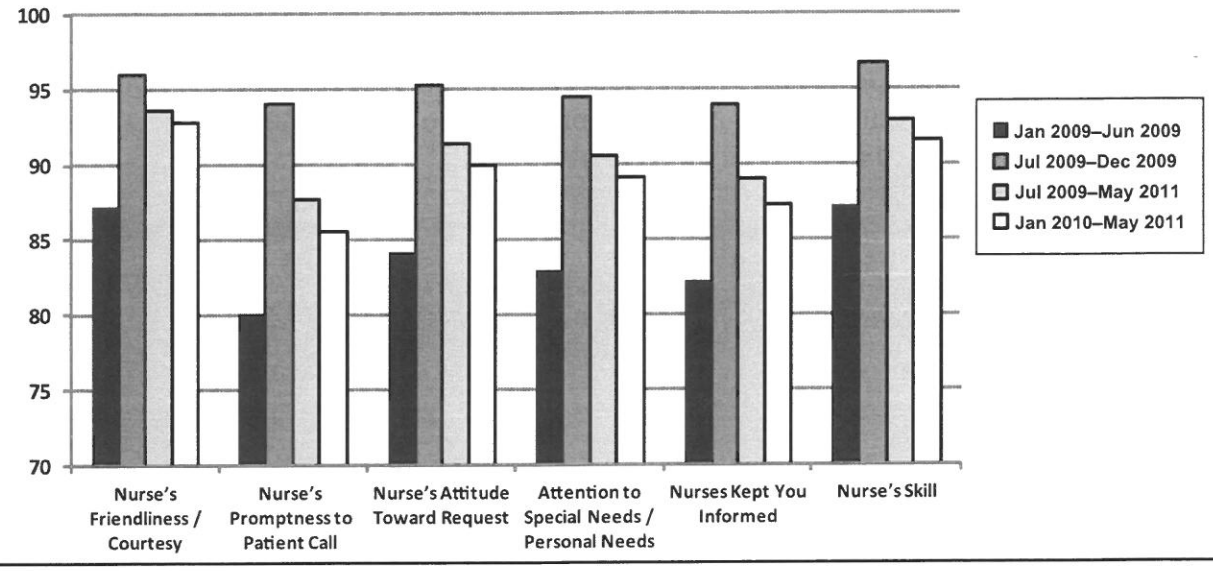


Figure 3. *For the first 6-month postimplementation, the monthly patient satisfaction ratings for the individual items increased an average of 11.1 points (range, 8.7–14.0). For the entire 23-month follow-up period, there was less overall improvement, with an average increase of 6.9 points (range, 5.5–7.6).*

**Nursing-Related Mean Patient Percentile Ranking Categories Preimplementation Baseline (January–June 2009) and Postimplementation Changes in Nurse Shift Handoff Process for Selected Time Periods (July 2009–May 2011)**

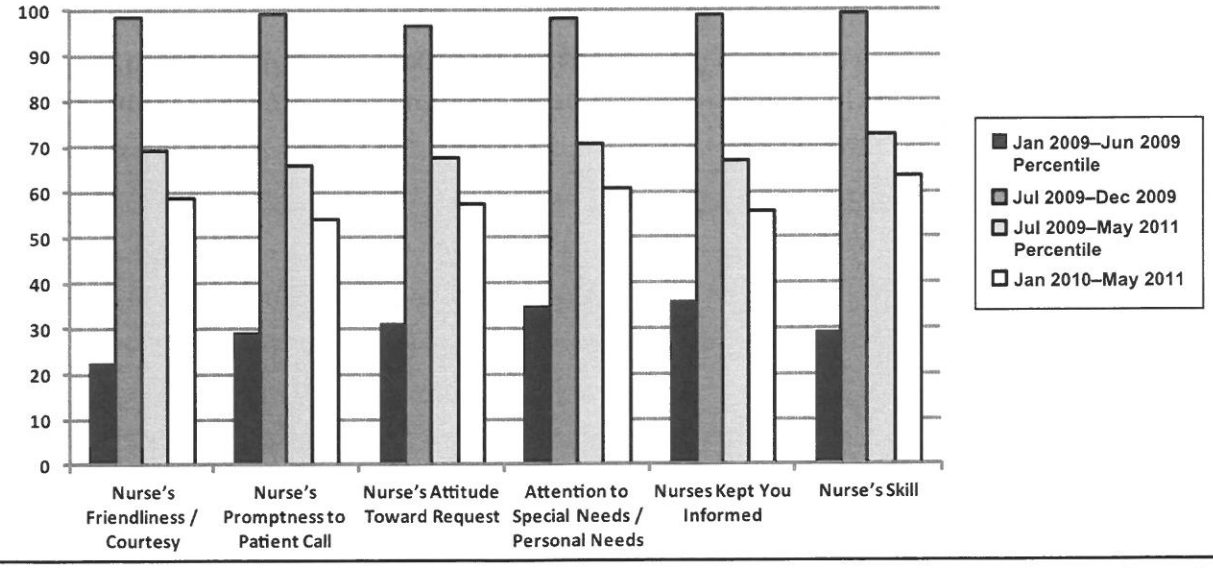


Figure 4. *For the percentile rankings for the first 6-month follow-up period, the percentile improvement for the six items averaged 67 points (range, 64–76 percentile points). In contrast, for the entire 23-month postimplementation period, there was less, but still substantial improvement, by an average of 38 percentile points (range, 30.7–46.7) for the six items.*

Table 4. Summary of Postimplementation Nurse Perceptions Related to the Transition to Bedside Shift Reports: October 2009 ($N$ = 24 [75%])* and February 2011† ($N$ = 22 [69%])

| | October 2009 Mean‡ | February 2011 Mean‡ |
|---|---|---|
| Improved Nurse to Nurse Communications | 4.3 | 4.0 |
| Improved Information Quality & Usefulness | 4.2 | 3.9 |
| Allows for Smoother Transition Experience for Patients | 4.0 | 3.9 |
| Easier for Me to "Come up to speed" on Patients Not Previously Cared for | 3.8 | 4.0 |
| Very Easy to Implement | 3.6 | 3.6 |
| Requires More Time to Complete End of Shift Handoffs | 2.9 | 2.7 |
| Difficult Communicating When There Is 1+ Offgoing Nurses to Coordinate with | 3.3 | 2.5 |
| Positively Received by Nurses | 3.5 | 3.5 |
| Positively Received by Patients | 4.1 | 4.1 |
| Patients Would Prefer Handoffs at Bedside | 3.9 | 4.0 |
| Nurses on Unit Prefer Shift Handoff at Bedside | 3.3 | 3.4 |
| I Prefer Shift Handoff at Bedside | 4.0 | 3.9 |

* Survey about 4 months postimplementation. Response rate is provided.
† Survey about 20 months postimplementation.
‡ 1 = "Strongly Disagree," 2 = "Disagree," 3 = "Neither Disagree or Agree," 4 = "Agree," 5 = "Strongly Agree."

utes or less) local videos produced that demonstrate ways of managing these situations, and practice sessions were held in which bedside communication skills could be developed and refined. These videos have been incorporated into the orientation for new nursing staff to introduce them to the bedside shift report process.

*3. Implementing a new policy or procedure does not necessarily mean that it is being carried out as intended.* A policy requiring bedside shift reports, like a policy requiring handwashing to improve hand hygiene, has intuitive logic as a means to improve patient care. Yet, as experience with handwashing suggests, it is essential to continue ongoing monitoring (through monthly feedback on compliance,[25] for example) to maintain the gains. In this pilot study, although the transition to the bedside handoff looked very good at six months after implementation, our long-term follow-up indicated that it was premature to "declare victory" and drop the focus on sustaining the change.

*4. Sustaining major gains may be harder than initially achieving them.* This lesson, which reflects a common finding in the quality improvement literature,[26] usually reflects the pressures of other organizational changes. We identified three substantial "dips" in the patient satisfaction scores during the postimplementation period. Two of these decreases coincided with major changes in implementation of the electronic health record: one during the transition to the electronic medication administration record, which also entailed the use of bedside bar-code scanners, and the other approximately at the time when the medical center implemented its computerized provider order entry (CPOE) system. Both implementations disrupted nursing practices, as reflected in significant changes to nurses' work flow, and, consequently, to the nurses' interactions with patients. (The third decrease occurred about two months after the CPOE implementation). In an effort to sustain the gains, we investigated whether there were changes in how the bedside nursing reports were being conducted. By observing nurses during the shift reports, resurveying them about the shift report process, and interviewing a series of patients about their experience with the bedside shift reports, we gained new insights. We held discussions with staff, and patient satisfaction scores improved.

*5. Staff attitudes and perceptions should be periodically assessed.* Assessing staff attitudes and perceptions both before and after implementation is essential to identifying when subsequent "implementation boosters" may be needed. Similarly, it is essential that as new staff join the unit they be fully acculturated into the expected ways of doing work.

Despite the substantial gain and maintenance of patient satisfaction scores, a subgroup of nurses have been less supportive of the bedside shift report process. "Hardwiring" new processes and behaviors takes time and attention over the long term and cannot be done as a quick fix.[27,28] This highlights the need for and value of periodically assessing staff attitudes and perceptions, not just in the immediate postimplementation period but in the long term. It is important to recognize that possibly negative attitudes and perceptions need to be addressed if gains are to be

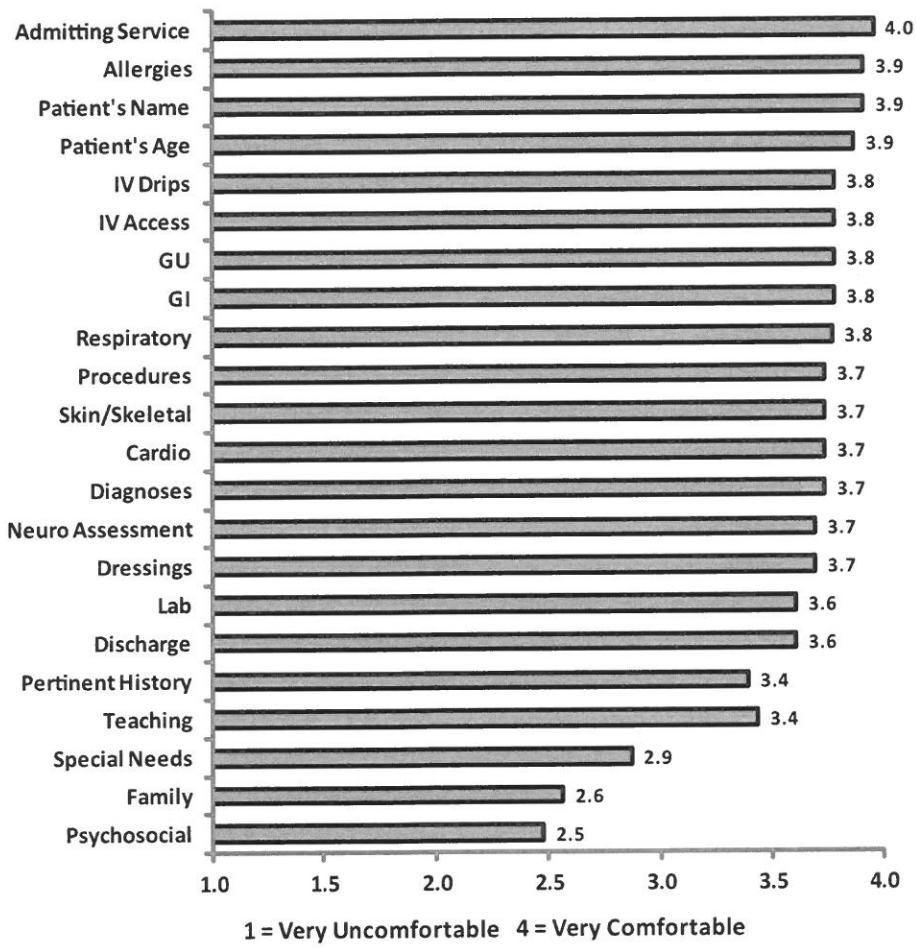


Figure 5. *The specific items for which 23 nurses expressed the least comfort in discussing at the bedside were Pertinent History, Teaching, Special Needs, Family, and Psychosocial issues. IV, intravenous; GU, gastrourinary; GI, gastrointestinal; Cardio, cardiology; Neuro, neurologic; Lab, laboratory.*

sustained. In our case, this was particularly important because only the study unit had made the transition to bedside reports, a practice of which float nurses have had to be reminded. On the basis of the postimplementation nursing survey results, the unit manager and supervisors, mindful that the beside shift report practice had yet to be hardwired, have been urged to continue close monitoring of the patient satisfaction scores, observe staff conducting the reports, hold periodic training boosters, and ask patients about their shift report experiences.

## Limitations

There are several potential limitations to consider. First, the data reported for this pilot study pertain to only one nursing unit in an academic medical center. Other inpatient nursing units within the same facility may have important differences in their unit culture, socialization, and/or communication practices, which might differentially affect the process for implementing a bedside shift report process. Second, in view of the relatively low patient response rates (22%–35%) and limited number of completed patient satisfaction surveys (8–25 a month), the data may not be representative of all the patients cared for on the study unit. On a smaller unit, or during times of low census, obtaining sufficient patient responses is particularly difficult. Finally, the structured patient interviews were limited by the fact that patients may respond more favorably when still hospitalized rather than after discharge.

## Conclusion

Although the transition to bedside shift reports met with some resistance, the transition was made smoother by extensive planning, training, and gradual implementation. Although nurse bedside shift reports are more patient centered, data analyses supported the need for continued monitoring and periodic interventions necessary to sustain the desired change in practice. J

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**Online-Only Content**

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Appendix 1. Nurse Responses to Questions Related to Existing End-of-Shift Handoff Process, May 2009 ($N = 18$)

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