

Bedside Report and its Effects on Patients and Nurses: A Quality Improvement Project

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Abstract

Aim: The aim of this project was to investigate how re-education on bedside reporting would affect Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores, medication errors, patient falls, and Registered Nurse's (RN) perceptions of bedside report at a Magnet designated community hospital.

Background: It has been well documented that bedside report improves patient safety and satisfaction, and nurse satisfaction. However, bedside report at this particular institution was inconsistently performed.

Method: Data was collected on HCAHPS scores, medication errors, and patient falls. A pre and post survey assessing nurse's perception of bedside report was completed. The Clinical Patient Experience Manager began training in June of 2016.

Results: The results of the project suggested that bedside report shows improvement on HCAHPS scores, patient falls, medication errors, and nurse's perception of bedside report.

Conclusion: The improved outcome measures may be attributed to the communication between staff and the patients that occurs during bedside report.

Implications for Nursing Management: Nurse leaders are responsible for ensuring the success of their team through effective communication, meeting quality measures, and improving patient satisfaction. Innovative leaders should encourage and monitor this handoff process to maintain the practice of bedside report hospital-wide.

Keywords: Bedside; Hand Off; Shift Reports; Patient Safety

Abbreviations: HCAHPS: Hospital Consumer Assessment of Healthcare Providers and Systems; RN: Registered Nurse's; HIPAA: Health Insurance Portability and Accountability Act; NRC: National Research Corporation; CMS: Centers for Medicare and Medicaid; AHRQ: Agency for Healthcare Research and Quality; I-

SHAPED; Introduce, Situation-Current Issue, History, Assessment, Plan, Error Prevention, and Dialogue.

Introduction

According to the Joint Commission [1], improving staff communication is a national patient safety goal. Poor

communication may play a role leading to sentinel patient events, such as falls or medication errors [2]. Change of shift has the potential for miscommunication in an environment with frequent interruptions. Handoff refers to the transfer and acceptance of responsibility of the patient through communication of information to promote continuity of patient care between caregivers [1]. Patients should be informed about their diagnosis and their plan of care to give them opportunities to ask questions or correct misinformation. Bedside report is one strategy to improve communication between the staff and the patient. Bedside report was not performed consistently across inpatient nursing units at a Magnet designated, 300-bed community teaching hospital on the north side of Chicago. It was the goal of nursing leadership to implement consistency in practice regarding bedside report to increase patient safety in addition to patient and nurse satisfaction.

Background

Literature Review

Bedside report is an evidence-based practice; it is described extensively in the literature as a strategy to improve communication, and ultimately patient care. The literature overwhelmingly supports that bedside report increases patient outcomes and patient and nurse satisfaction by establishing trust, enhancing communication, and facilitating information sharing with nurses, patients, and their families; thus, patients feel that they are actively involved in their care [2,3]. The literature suggests that there is a link between bedside report and Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores, specifically, the communication dimension [4]. The communication dimension for patient satisfaction includes patient communication with nurses and other providers delivering care [5]. Patients feel that the staff were respectful to them and worked better as a team when they participated in the plan of care [6].

Furthermore, bedside report enhances patient safety by improving report accuracy, minimizing communication errors and allowing patients to express concerns, or ask questions during report [2,4]. When patients and their families are actively involved in discharge planning, they are more likely to understand and comply with the plan of care, improving patient safety. Also, safety is enhanced when the nurses review medications, equipment settings, and patient care environment during bedside report [6,7]. Moreover, several studies demonstrated a decrease in patient falls and medication errors [6-8].

Nurse satisfaction is another well documented benefit of bedside report as it promotes stronger communication among the nurses, which further improves teamwork and respect among staff with the end result of increased nurse accountability [4]. Report done with the patient present promotes professional communication among the nurses as it allows the oncoming nurse to check intravenous sites, surgical incisions, lines, and infusion rates [3]. Nurse satisfaction increases with improved time efficiency as a result (2014). In addition, when nurses are able to clarify information and assess patients immediately, they can prioritize care quickly [3]. Spivey, et al. [3] reported that the time needed for shift change decreased from an average of 66 minutes to 39 minutes with bedside report. On the other hand, report done away from the bedside has the tendency to be more disorganized, lengthier than necessary, and poses the risk for interruptions and socialization among the nurses [4].

Barriers of Bedside Report

One barrier associated with bedside report may be related to patient privacy concerns. However, bedside report is already included in the Health Insurance Portability and Accountability Act (HIPAA) [4]. Another barrier may be the length of time associated with bedside report, but the majority of the literature found that report at the bedside took less time [2]. Other barriers of bedside report include fear of waking up patients, that medical jargon may confuse patients or increase anxiety, or that the patient or family may monopolize the conversation during report [6].

Methods

Design, Sample, and Setting

This pre and post intervention quantitative improvement project took place at a 300-bed community teaching hospital with Magnet designation on the north side of Chicago. All the inpatient nurses with the exception of the emergency department and psychiatric department were targeted for this project. All staff nurses were sent messages via the hospital computer system inviting them to participate in an on-line survey regarding nurse hand-off (Appendix A). The survey solicited information concerning nurses' perception of hand off communication. A total of 92 nurses took the pre-implementation survey in March 2016.

Financial reimbursement is tied to quality metrics. The National Research Corporation (NRC) Health is the instrument used at this hospital to assess patient satisfaction. NRC Picker provides their clients control

charts that rely on sound statistical process control techniques that have been developed to display percent response information and means score information (NRC picker.com).

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is the first national, standardized publicly reported survey of patients' hospital care developed by Centers for Medicare and Medicaid (CMS) and the Agency for Healthcare Research and Quality (AHRQ) [9]. The survey had three main goals: 1: to allow patients to compare hospitals; 2: to incentivize hospitals to improve quality of care and 3: to provide transparency of the quality of care being rendered [9]. HCAHPS also has an initiative that ties reimbursement to quality outcomes, moving from a pay for reporting to pay for performance. The amount of reimbursement tied to the survey doubled in 2017 [9]. There must be a minimum of 300 survey submitted by eligible patients for each quarter. Eligible patients have had an acute care overnight stay, and over 18 years of age [9]. The survey allows for comparisons to be made across hospitals citywide, state wide, and nationwide. The survey asks patients about their hospital experience regarding communication with nurses and doctors, responsiveness of hospital staff, the cleanliness and quietness of the hospital environment, pain management, communication about medication, discharge information, overall rating of the hospital, and whether they would recommend the hospital [10]. This quality improvement project sought to determine improvement in HCAHPS scores, patient falls, medication errors, and nurse's perception following re-education of bedside report.

Pre-Implementation

To start, the Clinical Patient Experience Manager assessed the units on whether bedside report was being done at the bedside by documenting "yes" or "no" on a log. An online survey that measured nurse perception of bedside report was conducted pre and post implementation included questions considering the effectiveness and efficiency of communication, stress level, and delays in patient care, accountability, timeliness, and patient involvement (Appendix A). Additionally, unit champions were solicited to promote buy-in to the change.

Baseline HCAHPS scores were obtained from the Catalyst report on the National Research Corporation (NRC) Picker website during the 2nd quarter between April-June 2016. Data on post implementation of HCAHPS scores was retrieved during quarter 3 of 2016 through quarter 2, April to June of 2017.

One of the quality metrics that the nursing leaders sought to improve was whether bedside report may improve the patient fall rate. Baseline data was obtained on all patient falls with or without injury from the Informatics Nurse during the time period of March to May 2016. Data was also collected using the patient event reporting system. The patient event reporting system is a database in which events such as falls, medication errors, as well as other safety events are stored. Patient falls between June to September 2016 were examined as post-implementation data.

In addition, baseline data on the number of medication errors related to nursing practice was collected four months pre and post implementation. This data was also retrieved from the patient event reports.

Theoretical Framework

Lewin's theory of change was used as the theoretical framework for this quality improvement project. According to the theory, for change to occur three stages need to take place: unfreezing, moving, and refreezing [11]. The unfreezing stage is about recognizing the need for change, building trust, and encouraging participation in the intervention. During the moving stage, the focus is on planning change, initiating change, and revising the process based on feedback. Finally, the refreezing stage involves integrating the change into practice [11].

Implementation

During the unfreezing stage, the nurses were invited to take online surveys that assessed their current attitudes about bedside report (Appendix A). The Clinical Patient Experience Manager rounded on the units to review the barriers and benefits of bedside report. Barriers included anxiety, fear, privacy, length of report time, feelings of being talked over were identified and addressed. The benefits of report were explained during the in-services to raise awareness of the change. Unit champions were recruited on the units to promote change. Journal articles were available to all staff on the online hospital education center to further raise awareness of the need for change [12-16].

During the moving stage, the Clinical Patient Experience Manager began training RNs on bedside report throughout June of 2016. The training included explaining methods to standardize the practice of bedside report. In-services and interactive demonstrations of bedside report were conducted on the units. Staff nurses were instructed to utilize the white boards in patient rooms as communication tools. White boards were to be

updated during handoff report. Nurses were given a handout and a laminated card as a reminder of what to include in bedside report. The laminated card contained the I-SHAPED (Introduce, Situation-Current Issue, History, Assessment, Plan, Error Prevention, and Dialogue) acronym (Appendix F). A video was created as a tool for learning and posted on the hospital intranet.

During the re-freezing stage, unit managers promoted and encouraged nurses to perform bedside report as instructed to maintain consistency in practice [17]. Also, the clinical patient experience manager involved the unit leaders in monitoring compliance with the new practice. The unit leaders were “secret shoppers” observed the nurses during shift change. The Clinical Patient Experience Manager monitored and documented “yes” or “no” on a log. If bedside report was not conducted, managers were notified [18]. Results were reported to managers and the Chief Nursing Officer. Literature reveals that reinforcement by unit managers regarding the benefits of bedside report was shown to increase nurse acceptance with the practice change [6].

Finally, all nurses on the nursing units had one month to access the post implementation survey that had the same questions as the pre-implementation survey (Appendix A). A post-survey was conducted, and the results of the survey were shared with the staff.

Data Analysis

Patient safety event reports were examined from the hospital event reporting system. Medication errors were also reported using that database. A total of 27 nursing related medication error events were documented for the quarter prior to the study implementation, whereas there were only 14 errors documented for the quarter period post training implementation, a decline of 48%. HCAHPS scores were obtained from the NRC website [19,20]. Pre implementation HCAHPS scores were extracted from the 2nd quarter of 2016, April-June. Post implementation scores were extracted during the 3rd quarter of 2016, July-September. The NRC picker dimensions that were considered for this project were overall score, RN communication, care transitions, discharge information, and physician communication. Regarding falls, the pre-implementation data was 3.87/average fall rate per 1,000 patient days, and post implementation was 3.55/1,000 patient days.

Results

A total of 216 nurses were invited to participate in taking the survey about the hand off process, with a

return rate of 43% pre implementation, and a small return rate of 29% post implementation.

Sixty-two nurses took the post implementation survey that was open from October thru November 2016. The on-line survey contained the same questions pre-and post-implementation (Appendix A). The staff nurses were notified via the hospital message system of the results of the pre and post implementation surveys.

Ninety-two nurses were surveyed over a period of three months (March-May 2016) to assess their perception of the hand-off process. The survey assessed their perception on the effectiveness and efficiency of hand-off communication, the level of stress experienced during that process, nurse concerns related to delays in patient care, as well as the time needed to complete the handoff report. Nursing satisfaction with the handoff process was demonstrated in the following areas of the post survey results: an 11% improvement in communication, 13% improvement in efficiency of the process, and 12% increase in nurse accountability (Appendix B). Post survey results also demonstrated that nurses felt strongly that the hand off report was much less stressful than originally anticipated; it prevented delays in patient care and was done in a reasonable amount of time. Most noteworthy, the staff was in agreement that bedside report promoted patient involvement. That post survey dimension in this category doubled as a result of hand off report. There was significant improvement in all categories ranging from 7-24% (Appendix B).

Outcomes

When assessing medication errors related to nursing practice, it was found that there was a 50% decrease in medication errors post implementation (Appendix C).

The average fall rate per 1,000 patient days pre-intervention was increasing (Appendix D). Post-implementation, there was a spike in June, but then a steady decline for July, August, and September across all data points. HCAHPS scores were also impacted by the bedside report process. The percentile increased in the following areas: overall score, RN communication, care transitions, discharge information across all data points (Appendix E). Patient experiences regarding their stay at the hospital overall was found to be more positive in the months after implementation, from 60.2% initially pre-implementation to 66.4% or above in the quarters post-implementation.

Key drivers influence the overall rating score. NRC Picker key driver questions have the highest correlation

toward the overall score. One of the key drivers is nurse's ability to listen to patients, which is a component of communication. Again, improvement was noted in RN communication across all data points (Appendix E).

The care transition dimension assessing the hospital staff preparing patients for discharge, improved from 45.6% at or above 48.8%. Furthermore, the survey asked questions to gauge patients' perception of discharge teaching involving knowledge of caring for oneself at home, including how to take medications, and signs and symptoms to report to doctor, and when to seek additional treatment for an emergency. The dimension of discharge teaching was stronger in subsequent months after the project was launched 78.9% to 84.7% or above.

In conclusion, the handoff process showed improvement in all surveyed questions after bedside report was reintroduced.

Discussion

Compliance with bedside report increased throughout the hospital. Patient satisfaction percentile responses improved for RN communication, care transition, discharge information, and the overall score. The average fall rate per 1,000 patient days decreased and total medication errors also decreased post implementation. The nurses' perception of the handoff process showed improvement in communication, nurse accountability, and patient involvement. In addition, RNs reported a decrease in stress and in handoff communication in a reasonable amount of time (Appendix F).

Overall, higher HCAHPS scores, reduction in medication errors, and patient falls post-implementation, may be attributed to enhanced communication among staff and patients related to the practice of bedside report. There are factors to be considered that impacted these results. First, the staff nurses were educated on the evidence that supports bedside report. Second, benefits and barriers were discussed as well as how they can affect HCAHPS scores. Third, the ISHAPED acronym was used to standardize what should be included in bedside report. Finally, the support of the CNO and nursing leaders set the expectation of the rollout, and the monitoring after the education was done to ensure standardization.

The intended outcome of the project was to standardize the practice of bedside report hospital-wide. Nursing leaders observed both positive and negative challenges of the change. The important benefit achieved from the quality improvement project was improved

communication among nurses, patients and families, and other team members. Effective communication is the key to patient safety, patient satisfaction, and nurse satisfaction.

The results of the nursing handoff survey indicate that staff nurses have reaped the benefits of bedside report. Nurse perception of time management improved; when nurses attended to patients immediately, they are able to address concerns promptly. Increased consistency of performing report at the bedside after education and monitoring may have contributed to nurses' perception that bedside report is less stressful and does not take as long as they once perceived. Patients reported to the patient experience manager that they felt comfortable seeing the two nurses together, hearing the exchange of information, and having the opportunity to participate if desired. The managers, who rounded on units other than their own, reported to the Clinical Patient Experience Manager their individual observations of compliance with the practice change. Overall, nursing managers felt that the practice of bedside report was being performed more consistently than before the project began.

Sustaining staff comfort of performing bedside report remains a challenge. One challenge is bedside report may not have been done as instructed. Furthermore, indirect circumstances such as patients participating in physical and occupational therapy during shift change were not able to participate in the bedside report process. Nurses are not always informing the patients about the change of nurses or asking patients' permission to give report. Other examples of challenges that were discovered were resistance to change. For example, nurses stood in doorways of isolation rooms, and they did not involve the patient by asking the patient if they had any questions about what they heard. Additionally, multiple interruptions from the patient and or family members were mentioned as an obstacle. Furthermore, the fear of waking up patients at 2300 on eight hour shift units may also be a barrier in performing bedside report.

Conclusion

Improving patient safety and quality outcomes are a top priority for healthcare organizations. There is a direct correlation with HCAHPS scores and quality outcomes [9]. Therefore, the metrics included in the survey are compensated for, and are likely to achieve maximum reimbursement. Improvement was achieved in patient satisfaction, reduction of falls, and medication errors post implementation of this project. Applying Lewin's theory of change as a framework improved the consistency of the

handoff report process throughout the organization, encouraged patient centered care, and enhanced communication between nurses and patients. Evidence-based nursing practice is constantly evolving. Thus, staff and leaders need to be flexible to make changes based on evidence. By standardizing bedside report in inpatient nursing units throughout the organization, nursing leaders as well as the bedside nurses facilitate changes ensuring that bedside report is utilized as a tool to improve patient safety, quality outcomes, and communication between the nurse and patient.

Sustaining change requires consistency and continuous monitoring until the change is hardwired. The challenges observed during the roll out of the project demonstrated the need for periodic monitoring of bedside report. Re-introducing bedside report as an evidence based practice was the first step in promoting compliance with the change.

Limitations

One limitation involved the lack of control over the number of times the online survey could be completed. The survey allowed for more than one submission. The results of the survey may not be generalizable to all the nurses in the facility because nurses in the outpatient areas, such as ambulatory surgery, and certain inpatient areas, such as the psychiatric unit, were not accounted in the study due to the nature of those units. The routine for shift to shift handoff on those specialty areas differs from the typical routine of most inpatient units. Another limitation is the small sample size of those responding to the survey post implementation. Other possible resources to increase the percentage of the post survey return rate may be flyers on the unit, more emails, messages via our scheduling software, and mention at shift change huddles.

Quality data on patient falls and medication errors that is released every month did not take into consideration hospital census and patient acuity. The length of time the project lasted may be another limitation. It is difficult to say whether the results in all the areas examined would have been sustained if measured over a longer time period.

Implications for Nurse Leaders

Nurse leaders are responsible for ensuring the success of their team through effective communication, meeting quality measures, and improving patient satisfaction. Our organization used innovative ways to increase participation of bedside report. The process that has been described concerning implementing bedside report may

give other institutions an example on how bedside report can be implemented. Innovative leaders should encourage and monitor this handoff process to maintain the practice of bedside report hospital wide.

Recommendations for Future Research

In summary, a review of the literature suggests positive outcomes surrounding bedside report. Future studies can provide additional data examining the impact of bedside report on falls, medication errors, and other quality indicators. Moreover, the project can be duplicated in a variety of nursing units, such as medical-surgical units, critical care areas, and obstetrics, to better generalize findings. Future studies can involve standardized evaluation tools and also include trained observers who can randomly observe and generate valuable comments and observations. Longitudinal data gathered over a longer period of time can assess whether bedside report reduces falls, medication errors, and increases HCAHPS scores six months to a year. Finally, future studies can survey patients for their understanding of care and their perceptions of bedside report by incorporating relevant questions in the HCAHPS surveys.

Sources of Funding

No special funding was required for this pilot

Ethics Approval

No formal ethics approval was required.

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