Implementation of Patient-Centered Bedside Report to Increase Patient and Staff Satisfaction

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Patient-centered bedside report is the process of transferring the responsibility of patient care from one member of the healthcare team to another at the change of shift. A large amount of critical patient information is communicated during the patient bedside report process (Thomas, Schultz, Hannaford, & Runciman, 2013). It has been eleven years since The Joint Commission (2006) initially identified the need for healthcare facilities to develop a standardized process for hand-off communication. Famolaro et al. (2016) conducted a nationwide survey and identified that the struggle to provide effective patient hand-off continues in many hospital facilities putting the patient at risk. Approximately half of the healthcare providers surveyed felt hand-off communication at shift change was problematic and that important patient information was often left out of the report. The opportunity to ineffectively communicate information is increased when communication occurs amid distraction (Sand-Jecklin & Sherman, 2014 & Klee, Latta, Davis-Kirsch, & Pecchia, 2012). Historically patient hand-off has been conducted either in a crowded breakroom or in an open hallway. Consequences of a poor hand-off may include delays in treatment, incorrect treatment or decreased patient and staff satisfaction (Aspden, Wolcott, Paulgod, & Bastien, 2006; Patterson & Wears, 2010 & "The Joint Commission: Perspectives," 2013).

Ensuring consistent and accurate communication is an important strategy in preventing adverse events (Matic, Davidson, & Salamonson, 2010). The utilization of a standardized patient hand-off process which occurs at the patients' bedside may improve communication, enhance the quality of patient care and increase patient safety by ensuring that critical patient information is reliably transferred (Institute for Family-Centered Care, 2010). Conducting patient hand-off at

the bedside also encourages patients to be involved in their plans of care (Anderson & Mangino, 2006; Radtke, 2013; Rush, 2012).

In 2009, the United States the Army Nurse Corps implemented the nursing professional practice model, Patient Caring Touch System (PCTS). This model was developed to reduce quality variance by adopting a set of validated best practices. PCTS identified Enhanced Communication as one of its foundational tenets with bedside report for patient hand-off, as one of its practice expectations. Though this professional practice model was initially implemented in 2009, many military treatment facilities continue to struggle with standardized communication behaviors for patient hand-off. Bedside report was not being practiced within the military medical facility, which was the focus of this project. The purpose of this scholarly project was to implement and evaluate a standardized patient-centered bedside report process within a United States Army Medical Center in Germany. The anticipated outcomes with the implementation of patient-centered bedside report included improving patient and nursing staff satisfaction with the hand-off process.

## Theoretical Framework

The theoretical framework utilized for implementing this performance improvement project was Diffusion of Innovation (DOI). According to Rogers (2003) diffusion is the process in which innovations are communicated widely among members of a group or system. In this framework, adopters of the innovation can be divided up into five categories: innovators, early adopters, early majority, late majority and laggards. Rogers stresses that peer networks are a principal factor in the diffusion process. The innovators and early adopters are often opinion leaders in an organization and can create forward movement of adoption of a process or idea. The innovation of patient centered bedside report is a not an unfamiliar concept to many of the

staff, however, there has been resistance to change from the traditional model of patient report outside the patients' room. In initial attempts to adopt bedside report, unit managers directed implementation without ensuring the innovators and early adopters were fully engaged in the process. Engaging the Unit Practice Council was necessary to ensure those unit leaders and innovators, were fully committed to the success of this practice change.

Rogers (2003) describes five characteristics of successful innovations: relative advantage, observability, compatibility, complexity, and trialability. These characteristics were incorporated throughout the implementation of this quality improvement project. Providing a clear understanding of the proposed changes and the literature supporting the advantages of bedside report to the staff increased the likelihood of a successful change in practice. Visibility was ensured by clearly identifying and communicating the benefits of bedside report to all participants in the process. Additionally, initial training utilizing role playing was conducted. This change was tied to the organization's mission, promoting staff understanding. By providing a structured format for the hand-off process the complexity of the designed change was reduced.

Literature Review

This review of the literature will begin broadly, presenting four studies with evidence supporting the practice of bedside report, also referred in the literature as patient hand-off, to improve patient and staff satisfaction (Anderson & Mangino, 2006; Maxson, Derby, Wrobleski & Foss, 2012; Radtke, 2013; Tidwell et al., 2011). The literature review will proceed by highlighting a study with evidence associating bedside report with decreased medication errors (Sand-Jecklin & Sherman, 2014). Finally, this review will conclude with an integrative review, which addresses the importance of a standardized format of patient-centered bedside hand-off (Staggers & Blaz, 2012).

The process of patient-centered bedside report and the interaction between the patients and the nursing care team has numerous benefits. Anderson and Mangino (2006) conducted a study to determine if implementing patient-centered bedside report, as opposed to taped reports would increase patient and staff satisfaction. The study consisted of a convenience sample of patients and nursing staff on a 32-bed general surgical unit. Utilizing a 5-point Likert scale, nursing staff and unlicensed assistive personnel (UAPs) were surveyed pre-and post-implementation to determine their satisfaction with the patient centered bedside report process. Results of the surveys indicated increased nurse satisfaction in all areas, including accountability, interpersonal relationships and receiving pertinent information. Four areas of patient satisfaction were also reviewed:  being kept informed, how well the staff worked together, how well pain was controlled, and if the patient felt included in treatment decisions. Again, the results reflected increases in satisfaction. Limitations of the study included an absence of statistical analysis of any of the quantitative results, and no reference to the reliability or validity of the survey tools. The evidence presented was utilized to identify a process for implementing change and establishing patient and nurse satisfaction areas for improvement.

In addition to patient and staff satisfaction, Maxson, Derby, Wrobleski and Foss (2012) also examined the impact of nursing shift report at the patient's bedside on staff communication and accountability. The researchers conducted a survey of a convenience sample of 60 patients and 15 nurses on a surgical unit in a Midwestern U.S. hospital. Staff nurses were surveyed on bedside report behaviors which included accountability, communication, nursing prioritization and medication reconciliation using a 5-point Likert scale. Results of the nurse survey reflected a change in pre-implementation mean scores from 2-4 (agree to disagree) to a post-implementation mean score of 1 (strongly agree). The majority of the questions in the survey had statistical

significance (p<0.05). A similar 5-point Likert scale was used for patients. There was a significant improvement in patient satisfaction related to the patient being informed of their plan of care from a mean of 2 pre-implementation to a mean of 1 post-implementation (p<0.02). In addition, nursing satisfaction with shift change medication reconciliation improved from a pre-implementation mean of 4 to a post-implementation mean of 1 (p<0.0003). Limitations of the study include a small sample size that may not have been representative other hospital units. Patients who completed the survey may also have previously experienced nursing bedside report in another facility.

Similar to the previous study, Radtke (2013) was interested in determining if having a standardized bedside report would improve patient satisfaction and nurse communication. Following Peplau's theory of Interpersonal Relations and Lewin's Change Theory, a pilot study was conducted with a convenience sample of 100 patients on a 16-bed medical/surgical intermediate care unit at a 320-bed tertiary-care facility in Wisconsin. Prior to the implementation, literature supporting patient-centered bedside report was presented to the collaborative practice council. In addition, the results of previous patient satisfaction surveys were shared with the group. Staff were educated on standardized bedside report and any questions they had regarding the process were answered. Over a period of 6 months, patient satisfaction with nurse communication increased from 75% to 87.6%.

To evaluate the effectiveness of bedside report on a 20-bed pediatric neuroscience unit in Memphis Tennessee, Tidwell et al. (2011) conducted a pre- and post-implementation pilot study using a convenience sample to assess patient and family satisfaction with nursing care and staff communication. Patient and nurse satisfaction was measured six months pre-and post-implementation of bedside reporting utilizing a 5-point Likert scale questionnaire. The

investigators found that patient/family satisfaction significantly increased in responses to two

questions: "How well did nurses keep you informed about your child's treatment and condition?"

(p = .0034) and "Did the staff on your nursing unit show respect for you and your child's needs?

(p = .0074). Nursing satisfaction surveys had a response rate of 74%. Seven of the ten surveys

had significantly higher scores than pre-implementation. A limitation of the study was that the

return rate of the patient surveys was very low at 35%.

       The use of bedside report has been shown to not only improve patient and staff

satisfaction, but also decrease medication errors. Over 450,000 medication errors occur annually

within the United States. Verbal and non-verbal communication during transitions of care has

been identified as an area where the potential for medication errors can occur (Institute of

Medicine [IOM], 2014). Utilizing a pre-and post-implementation quasi-experimental design,

Sand-Jecklin and Sherman (2014) conducted a study on medical-surgical units in a large

teaching hospital to determine if nursing change of shift report utilizing a blend of a recorded

report and bedside report was more effective than a solely recorded report. Using a convenience

sample; 232 patients and 70 families were surveyed pre-implementation and 178 patients and 72

families were surveyed post-implementation. In addition, 148 nurses were surveyed pre-

implementation, and 98 were surveyed post-implementation. The Patient Views on Nursing Care

instrument and the Nursing Assessment of Shift Report were utilized; both have 17 questions.

The questions measured effectiveness, patient and staff satisfaction, and the impact of a blended

method of report on patient safety. The patient satisfaction surveys identified no significant

differences among the pre- and two post-implementation surveys. However, independent *t*-test

comparisons revealed significantly higher scores post-implementation on: "made sure I knew

who my nurse was" and "include in shift report discussion." In the nursing surveys, "checks of

intravenous medication and safety" was one of the most frequent responses to what was going well with bedside report. Additionally, independent *t* tests indicated a significant positive difference on two of the survey question: ensuring accountability and involving patients in care. The overall number of documented medication errors decreased from 20 errors pre-implementation to 10 errors post-implementation. Though this was not a statistically significant difference the reduction in medication errors is considered clinically significant.

Staggers and Blaz (2012) synthesized the outcomes from multiple research studies conducted on bedside report. The purpose of this integrative review was to guide future computerization and standardization of the hand-off process on medical and surgical units. The studies reviewed covered the period of 1980 to 2011. Inclusion and exclusions criteria were clearly defined. Of the 81 articles retrieved for analysis, 30 were reviewed: 20 were qualitative, 4 were experimental and 6 were descriptive. The Quality Appraisal Checklist as well as the Quality Assessment Informatics Instrument were utilized for this integrative literature review. Both tools are considered reliable. This review identified that a structured and consistent format for hand-off improved information completeness.

In summary, several studies in the appraisal identified increases in patient and nurse satisfaction with bedside report (Anderson & Mangino, 2006; Maxson, Derby, Wrobleski & Foss, 2012; Radtke, 2013; Tidwell et al., 2011). In addition, the investigators in one study reported a statistically significant improvement in nursing accountability with patient bedside report (Maxson, Derby, Wrobleski & Foss, 2012). Most of the studies reviewed were based on single-study performance improvement projects (Anderson & Mangino, 2006; Maxson, Derby, Wrobleski & Foss, 2012; Radtke, 2013; Tidwell et al., 2011). Limitations in many of the studies reviewed were the lack of tools with established validity (Anderson & Mangino, 2006; Maxson,

Derby, Wrobleski & Foss, 2012; Radtke, 2013; Tidwell et al., 2011). The level of evidence to support positive outcomes associated with patient-centered bedside report for the studies in this review was low based on Melnyk and Fineout-Overholt's (2011) rating system for the hierarchy of evidence (see Table 1). The quality of the studies was also low using the Newhouse's (2006) Quality Rating Scheme (see Table 2). Though the level and quality of evidence to support bedside shift report is considered low, the practice puts the patient at the center of communication and promotes patient involvement in the plan of care. In addition, it affords the nursing team the opportunity to survey the patients' environment and discuss the plan of care at the beginning of a shift.

## Methods

A quality improvement (QI) project, focused on patient-centered bedside report, was implemented following the Diffusion of Innovation theoretical framework. This project was conducted on a 35-bed adult medical-surgical inpatient unit in 100-bed military medical center located in Germany. There were two samples for this project: patients and nurses. Inclusion criteria for the patient population included patients age 18 or older with no cognitive impairment, and the ability to understand and speak English. Inclusion criteria for the nursing sample included medical-surgical staff Registered Nurses, Licensed Practical Nurses and technicians who agreed to participate in the project.

**Procedures**

The QI project took place over a 12-week period. During the first week of implementation, a team of five project champions (early adopters) were selected from the members of the Unit Practice Council. Unit Practice Council members demonstrated an interest in improving practice on their units, were nominated by and voted in annually by their peers, and

each represented an average of 7-10 staff constituents. The members also volunteered to a be a champion for the project. The champions attended a 4-hour training session led by the project leader on the bedside report process using the Situation-Background-Assessment-Recommendation-Thank You (SBART) format (see Appendix A), conducting a safety check, and using the bedside whiteboard to record the patients plan of care. Information on the bedside report process, located in the patient's bedside binder, was part of champion education (see Appendix B). The champion education session included role-playing with other team champions and scripting bedside report. At the completion of the role-playing, the project leader demonstrated bedside report with a volunteer patient. Throughout the first week champions demonstrated bedside report on actual patients and the project leader signed them off as competent on the Bedside Report Competency Checklist (see Appendix C). At the end of the first week, at the monthly staff meeting, the project leader introduced the bedside report process to all staff. In addition, staff were invited to complete a seven-question paper and pen survey on their perceptions of bedside report.

During weeks two through four, the team champions educated staff members on the bedside report process. The champions were divided up into two shifts and had flexible schedules to ensure all staff had the opportunity to receive bedside report training. Staff role-played and scripted the bedside report process. Following the training the champion would observe the staff member conducting bedside report on actual patients and sign them off utilizing the Bedside Report Competency Checklist. The champions were responsible for completing the competencies for all medical surgical nursing staff. All Bedside Report Competency Checklists were dated and given to the Nurse Manager during the morning huddle for insertion in the individual staff members Competency Assessment Folder.

During weeks five through twelve, change of shift bedside report was conducted for patients on the medical-surgical unit utilizing the SBART bedside report format. The project leader or a champion was present during each change of shift to observe and support the practice change.

**Data Collection**

To determine if bedside report was being conducted, the project leader intermittently rounded on patients twice a week, varying the date of the week to assess if patient bedside report was being done. During rounding patients were asked if their nurses introduced themselves during report and if incoming and outgoing nurses gave report at the bedside. Patients were only asked about bedside report once during their admission.

The TRICARE Inpatient Satisfaction Survey (TRISS) is a standardized survey instrument utilized to measure the patients' experience with their inpatient care (TRICARE, 2015). This survey incorporates questions developed by the Agency for Healthcare Research and Quality and the Centers for Medicare and Medicaid Services. The survey is managed through the Defense Health Agency and the surveys collected are compared with civilian healthcare benchmarks published quarterly by Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS). The population sample is selected using a simple random sample of discharges drawn from military treatment facilities. Data are collected and reviewed quarterly to identify trends in patient satisfaction (Altarum Institute, 2013, p. 105). Data of interest for nursing communication in the TRISS survey are focused on four questions measured on a four-point Likert Scale (never, sometimes, usually and always; see Appendix D). TRISS questions focus on the nurse treating patients with courtesy and respect, listening carefully, responding to patient's needs, and explaining things thoroughly. These are concepts that have been identified in the

literature as being positively impacted by bedside report (Anderson & Mangino, 2006; Friesen, Turner, Speroni & Robinson, 2013). Data collected during the three months prior to implementation, during the implementation and three months post implementation were reviewed.

A survey tool, developed by Maxson, Derby, Wrobleski and Foss (2012), was used to measure nurse perceptions of bedside report (see Appendix E). The five items on this questionnaire measured changes in nursing perceptions of accountability, adequacy of communication at change of shift report, prioritization of workload, performance of medication reconciliation, and the ability to communicate with other health care providers. Each of these questions was answered using a five-point Likert scale (1=strongly agree, 5=strongly disagree). Permission was obtained from the survey authors for unrestricted use of the survey and for modifications of the scale to fit the project (see Appendix F). Two questions were added to the survey to determine nursing perceptions of barriers and advantages to conducting bedside report. Additionally, demographic data which included years nursing experience were collected with the survey. A paper survey was given to staff members during week one and at the end of week twelve. The staff champions were exempt from taking the survey.

In addition, a patient survey tool, also developed by Maxson, Derby, Wrobleski and Foss (2012), was used to measure patient perceptions of bedside report (see Appendix G). The survey measured the patients' perceptions on being informed of their plan of care, open communication between staff members about their plan of care, if they were satisfied with their input in their plan of care, and if they were satisfied with the professionalism and confidential manner used in report between providers. Each of these questions was answered using a five-point Likert scale

(1=strongly agree, 5=strongly disagree). Additionally, the patient was asked to provide the number of days they were admitted and additional space was provided for narrative comments. Prior to discharge, patients were requested to complete the survey and return it to the project manager in a sealed envelope or to leave the survey in a box located at the nurses' station. Face validity of the surveys was ensured through a thorough review of the literature and evaluation of the surveys by two doctorally prepared nurse scientists.

**Data Analysis**

To determine nurse compliance with conducting bedside report, weekly percentages of the data collected by the project manager during weeks 5-12 were arranged in a control chart and analyzed for linear trends over time. Additionally, the results of the TRICARE Inpatient Satisfaction Surveys collected by the institution for three months pre-implementation of bedside report were compared to the results from surveys collected three months during implementation and three months post-implementation. The data compared included the sample size, score and target percentages for each of the four nurse driven satisfaction measures.

Data from the nurse and patients' surveys were also analyzed. The demographic data collected through the nurse perception survey were analyzed with descriptive statistics utilizing Excel. Paired t-test analysis was done on the nurse perception survey data to compare any differences pre-and post-implementation of bedside report. Descriptive statistics were conducted to analyze the data from the patient perception survey post-implementation of bedside report. Qualitative responses to the two open ended questions on the nursing survey and the one open-ended question on the patient survey were typed verbatim into a word processing program. Content analysis seeking common trends and themes was completed by the project manager and a nursing scientist. Item analysis was done on the staff and patient perceptions' surveys to

compare findings to those reflected in Maxson, Derby, Wrobleski and Foss (2012). Chronbach alpha was used to determine internal consistency of the patient perception and nurse perception surveys.

**Human Subjects Protection**

Reports provided from TRISS did not contain patient identifiers. All reports generated were void of any patient or staff information. Surveys from patients and nurses were maintained in the facility in a locked office. In addition, all data were maintained in a password protected computer. This project was submitted to the University of Maryland Institutional Review Board (IRB), and received a Non-Human Subjects Research determination. The project was also reviewed by a military medical centers' IRB representative and received a Non-Human Subjects Research determination and was determined to be Performance Improvement. The project timeline is listed in Appendix H.

**Results**

Over 300 patients were admitted during the 8-week implementation period. The project leader rounded on 92 patients during this period to determine compliance with conducting bedside report. The patients reported that between 86-100% of the time bedside report was completed by nurses and nurses introduced themselves (see Table 1).

The TRICARE Inpatient Satisfaction Surveys reflected an increase in patient satisfaction from pre-implementation compared to the implementation period in three of the four nurse specific questions (see Table 2). The most notable increase was with the question "During this hospital stay, how often did nurses explain things in a way you could understand. In contrast, surveys from post-implementation showed a decrease from the implementation phase in all four questions. However, responses to two of the questions remained higher than pre-implementation;

"During this hospital stay, how often did nurses listen carefully to you?" and "During this hospital stay, how often did nurses explain things in a way you could understand?"

In conducting this project, 46 of 51 staff participated in the pre-implementation survey of nurse perceptions of bedside report, while 40 of 44 staff participated in the post-implementation survey. Pre-implementation the majority of respondents (57%) were female. Over 56% of the staff had less than three years' experience, and 41% had less than one-year experience. Post-implementation the majority of respondents (63%) were female. Over 70% had less than three years' experience, and 45% had less than one-year experience. Nurses' perceptions of bedside report significantly increased for most of the items on the survey, including nurse-to-nurse accountability ($p=0.00$), nurse communication at change of shift ($p=0.00$), medication reconciliation ($p=0.00$), and communication with physicians ($p=0.00$; see Table 3). Content analysis of nurse perceptions of bedside report reflected patient privacy, sleep hygiene and nurse workflow were barriers to conducting bedside report, while patient involvement, developing the plan of care and patient safety were considered facilitators to conducting bedside report (see Table 4).

During implementation 121 patients were surveyed (see Table 5). The mean length of stay was 4.5 days and ranged between one and nine days. Overall, mean scores of patients' perceptions of bedside report ranged from 1.26 to 1.64 (from 1 = strongly agree to 5 = strongly disagree). The survey results reflected that patients strongly agreed that nurses worked as a team and that bedside report was conducted in a professional manner. Content analysis of patient perceptions of nursing bedside report identified common themes in patients appreciating being involved in the report process, knowing their plan of care and nurses working as a team (see Table 6).

Both the patient and nurse surveys were analyzed for reliability of the measures in this population. Internal consistency for the Nurse Perceptions of Bedside Report Survey reflected a Chronbach Alpha coefficient of 0.84. The internal consistency of the patient perceptions survey was found to have a weak correlation with a negative value.

**Discussion**

Implementing change in a healthcare environment can be challenging. For change to be successful there must be a shared vision and clear direction amongst staff (Anderson & Mangino, 2006). Empowering staff during the implementation was likely a key factor for success. During this performance improvement project, patient reports collected by the project leader revealed that staff were compliant with changing from report conducted in the hallway and break room to conducting report at the patient's bedside.

Similar to Anderson and Mangino's findings (2006), identifying unit champions, or early adaptors and allowing them to contribute to the project development and training was most likely imperative in implementing this practice change. Ownership of the project and the continuous presence of champions throughout implementation almost certainly supported its success.

The TRISS data, which came directly from patients admitted to this unit, reflected slight increases in nurse driven behaviors during implementation of the project. The TRISS questions addressed behaviors associated with bedside report to include nurses listening, explaining and providing answers. The initial rise in patient satisfaction with bedside report and nurse communication was similar to those reported in previous studies (Friesen, Herbst, Turner, Speroni, & Robinson 2013; Radtke, 2013). However, the post implementation scores dropped back to reflect scores similar to pre-implementation. This decrease could be associated with champions no longer scheduled each shift and encouraging bedside report. A limitation of

utilizing TRISS to evaluate patient satisfaction was the limited variation found in the scores

across times periods, and the inability to analyze for statistically significant differences over

time.  Furthermore, a limitation of utilizing TRISS to determine the effects of bedside report on

patient satisfaction was that the nurse-driven questions in TRISS did not directly evaluate the

practice of bedside report.

Over 90% of the nursing staff completed both the pre- and post-implementation surveys.

This high return rate could be directly associated with the peer support and guidance provided by

the champions. The finding of increased nurse satisfaction with bedside report in this project was

consistent with the findings reflected in a similar study by Sand-Jecklin and Sherman (2013).

Nurses were surveyed after the initiation of bedside report, and overall, they reported that it was

effective, efficient, supported a more enhanced level of communication, allowed for open

discussion, clarification and development of a plan of care, and prevented safety problems

(Sand-Jecklin & Sherman, 2013).

During this project there were changes that were observed but not anticipated. Initial

comments from more experienced nurses reflected that bedside report would be too time-

consuming would not be successful. Post-implementation these same nurses became the biggest

champions; they felt standardizing bedside report improved the efficiency of the report process

and better prepared the novice nurse in developing the plan of care.  They also identified that the

time spent in report had decreased, similar to what was reported by Caruso (2007).

Internal consistency for the Nurse Perceptions of Bedside Report Survey had not been

previously reported in the Maxson et.al. (2012) study. In the current project the Chronbach

Aplha coefficient was 0.84. A limitation to this survey was that there may have been different

nurses who took the pre-implementation survey from those who took the post-implementation survey.

Similar to the results of the nurses' survey, patients were also satisfied with bedside report. Findings identified in this process improvement project were similar to those identified in the studies conducted by Friesen, et.al (2013) and Maxson & Derby (2012), However the results of this survey must be viewed with caution. In contrast to the nurse survey, the internal consistency for the items in this survey was found to be low. The survey results may also have reflected the patients' perception of communication from providers or ancillary staff, since some of the items did not specifically refer to nurses. Furthermore, this survey was only conducted during implementation and not pre- or post-implementation. To determine if the outcomes reflected in the surveys were associated with the education and implementation of bedside report a pre- and post-implementation survey may have been necessary.  The survey results may not have been reflective of a change. More research would be needed to evaluate the reliability of the patient survey, and to determine if the findings in this project were due to the specific context and setting, and/or the timing of the survey.

**Conclusions**

Report occurring in a breakroom or hallway does not allow patients the opportunity to be a part of the communication process. Bedside report allows for patients to be at the center of the decision-making process, and fully involved in the development of the plan of care. The benefits of bedside report are likely to include improved staff satisfaction as well as patient satisfaction. Implementing bedside report on a unit requires staff education, the use of best practices, and a mechanism for evaluation of the process by staff and patients. Selecting a team of champions to lead the implementation plan as well as developing a standardized report tool that includes

information, which is relevant to improve patient safety, can also be instrumental to successfully

implementing bedside report. Since bedside report appears to improve nurse-nurse and nurse-

patient communication, more quality improvement projects are needed that examine the

association of bedside report with falls, medications errors and nursing workflow.

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Table 1. Percent of Patients Receiving Nursing Introductions and Report at Bedside per Week

| Week | Introduction % | Report % |
|------|----------------|----------|
| 1 | 91 | 91 |
| 2 | 86 | 86 |
| 3 | 93 | 93 |
| 4 | 100 | 100 |
| 5 | 91 | 91 |
| 6 | 100 | 92 |
| 7 | 100 | 90 |
| 8 | 90 | 90 |

Table 2. Results of Tri-Care Inpatient Patient Satisfaction Survey (TRISS)

| TRISS Survey Questions | Pre-Implementation % (n = 82) | During implementation % (n = 74) | Post-Implementation % (n = 112) |
|---|---|---|---|
| During this hospital stay, how often did nurses treat you with courtesy and respect? | 97.8 | 94.8 | 93.4 |
| During this hospital stay, how often did nurses listen carefully to you? | 87.1 | 88.8 | 87.6 |
| During this hospital stay, how often did nurses explain things in a way you could understand? | 87.1 | 92.9 | 90.9 |
| During this hospital stay, how often did the nurse provide answers to your questions? | 91.3 | 92.2 | 90.6 |

Table 3. Nurse Perceptions of Bedside Report (1 = Strongly Agree, 5 = Strongly Disagree)

| Item | Pre-Intervention (n=46) Mean $\pm$ SD (Range) | Post – Intervention (n=37) Mean $\pm$ SD (Range) | $p$Value |
|---|---|---|---|
| Nurse-to-Nurse bedside shift report makes people accountable. | 2.1 $\pm$ 0.86 (3) | 1.4 $\pm$ 0.50 (1) | 0.00* |
| Nurse-to-Nurse bedside shift report provides adequate communication between nursing staff at change of shift. | 2 $\pm$ 0.87 (3) | 1.4 $\pm$ 0.50 (1) | 0.00 * |
| Nurse-to-Nurse bedside shift report helps me prioritize my workload. | 2.5 $\pm$ 1.07 (4) | 2.3 $\pm$ 0.81 (3) | 0.11 |
| Nurse-to-Nurse bedside shift report allows me to perform shift change medication reconciliation. | 2.4 $\pm$ 0.95 (3) | 1.4 $\pm$ 0.54 (2) | 0.00* |
| Immediately after nurse-to-nurse shift report, I am able to communicate with physicians regarding patient care. | 2.7 $\pm$ 1.05 (4) | 2.3 $\pm$ 0.66 (3) | 0.02* |

*$p < 0.05$
Note: Range was calculated as the difference between minimum and maximum scores

Table 4. Nurse Perceptions of Barriers and Facilitators to Bedside Report

| Themes | Comments |
|---|---|
| **Barriers** | |
| Privacy | -Sometimes there are visitors are at bedside – There is no privacy in multi patient rooms.<br>-Shared rooms can be disturbing to other patients.<br>-Other patients in the room that can hear report. |
| Sleep Hygiene | -Patient's don't want to be woken up. |
| Resource management | -Not having functional computers in the rooms to view order/medications.<br>-There can be too many people in the room; crowded.<br>-Takes time up in the morning when there are multiple nurses to report to.<br>-Takes too long with RN/LPN team |
| **Facilitators** | |
| Patient Involvement | -Patients can hear what report is and add input if needed.<br>-Patients feel involved.<br>-Pt helps remind nurse of possible missing pieces to SBAR.<br>-Patient becomes part of the team and is able to communicate any extra details they wish to say |
| Developing Plan of Care | -Able to immediately identify any issues with patients at bedside.<br>-You can see the condition of the patient and room, check fluids, meds, wounds.<br>-Able to assess patient's needs early rather than later in the shift. |
| Patient Safety | -Discrepancies and unclear orders cleared up.<br>-Less things get missed as far as orders, meds.<br>-You know the changes that happened to the patient before shift change. |

Table 5. Patient Perceptions of Bedside Report (1 = Strongly Agree, 5 = Strongly Disagree)

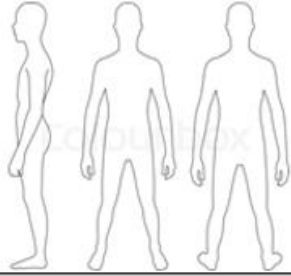| Item | Range | Mean ± S.D |
|---|---|---|
| I was informed of my plan of care for the day. | 3 | 1.44 ± 0.64 |
| There was open communication between members of the nursing team about my plan of care. | 2 | 1.44 ± 0.55 |
| I was satisfied with the amount of input I was able to give about my plan of care. | 2 | 1.32 ± 0.55 |
| My nurses worked together as a team. | 1 | 1.26 ± 0.44 |
| The report given between nursing team members was given in a professional manner. | 2 | 1.36 ± 0.5 |
| The report given between nursing team members was given in a confidential manner. | 3 | 1.64 ± 0.67 |

Note: Range was calculated as the difference between minimum and maximum scores

Table 6. Patients' Perceptions of Bedside Report

| Themes | Patient comments |
|---|---|
| Privacy | -The room was crowded but everything they said was okay.<br>-I thought report with me involved was good - but noisy with other patients in the room. |
| Patient Involvement | -I didn't want to be woke up at first but after I saw how they did it with other patients I asked to have mine done that way too.<br>-I liked being part of the team. Crowded room though.<br>-I was able to contribute when they left stuff out. |
| Plan of Care | -It was helpful to start the day knowing what was going to happen.<br>-They informed me of my plan of care - and when it changed - they let me know.<br>-I thought report with me involved was good - but noisy with other patients in the room.<br>-I liked that they wrote the plan on the board. |
| Teamwork | -Medics giving report with the nurse is really good!<br>-I love how the medic was a part of the team.<br>- The whole team was great. |

Appendix A

SBART Bedside Report (FRONT)

## SBART Bedside Report

| SITUATION | | |
|---|---|---|
| Name: | | TEAM: |
| Diagnosis (WHY is the patient in the hospital?): | | |

| BACKGROUND | | | |
|---|---|---|---|
| Code Status: | Full Code | DNR/DNI | Allergies: |
| Isolation: | | | |
| Pertinent History related to Hospitalization: | | | |
| Significant Events during Hospitalization: | | | |

**ASSESSMENT**

Head-to-Toe Assessment (by Exception):

| NEURO | | INTEG |
|---|---|---|
| MS | | |
| CARDIO | | |
| RESP | | |
| GI | | |
| GU | | |
| TUBES/DRAINS | | |

Vital Signs (by Exception):

| BP | | HR | | RESP | PULSE OX | O2 |
|---|---|---|---|---|---|---|
| PAIN | (Last Pain Med: | | ) | NAUSEA/EMESIS | (Last Antiemetic: | ) |

Lab Values (by Exception):

| IV Site/Date: | IV Fluid/Medications: |
|---|---|
| Diet: | Blood Sugar: |

MD Notification/INTERVENTIONS:

**RECOMMENDATIONS**

Referrals:

Plan of Care:

| | |
|---|---|
| ☐ Nurse Assessment | ☐ Med Rec (Signed by Physician AND Nurse) |
| ☐ Nurse Admission History | ☐ Multidisciplinary Patient Education |
| ☐ Nurse 24 Hour Note | ☐ Nurse Lead Note (Nursing Care Plan – Update every shift) |
| ☐ NIO order sets, as applicable (i.e. New Admission, Falls, Skin Breakdown, etc.) | |

## Thank you for letting us provide your care!

SBART Bedside Report (BACK)

1. Bedside report will be done as a team between on-going and off-going team members.
2. Use SBART Bedside report sheet as a guide (exclude sensitive information, i.e. psychosocial factors, non-pertinent events that occurred during the shift, etc. Sensitive information can be shared in a private area, outside the patient's room. This report sheet will be tuned in at the end of each shift. It is only necessary to include pertinent information on the sheet.
3. Update whiteboard (include Provider, Nursing Team, date and plan of care at a minimum).
4. Introduce the nursing staff to the patients and family members; invite the patient and family to participate in the shift report.
5. Open the medical record on the electronic work station in patient room.
6. Conduct a verbal SBART report with the patient and family.
7. Conduct a focused and assessment of the patient a safety assessment of the room
8. Review the tasks that need to be done, such as labs or tests, medications administered, forms that need to be completed, and so forth.
9. Identify the patient and family's needs or concerns.

SBART Key Points

**Situation**
Diagnosis: include what brought the patient to the hospital and Diagnosis (i.e. X3 day cough and febrile, admitted 27 December 2016 for pneumonia)
**Background**
Pertinent History: Include secondary Diagnosis/history related to diagnosis (i.e. History of COPD/PNA X2, denies home oxygen, patient now requires 3: oxygen via nasal cannula. Significant events during hospitalization: Patient experienced respiratory distress, requiring temporary intubation in the Intensive Care Unit for 2 days.
**Assessment**
Vital Signs (by exception): Rhonchi auscultated throughout, respirations 24 and non-labored, 3L oxygen via nasal cannula, saturation 94%, short of breath on exertion, productive cough.
Lab Values (by exception): $CO_2$ 60 at 0600hrs. Dr. Smith notified of abnormal value.
**Recommendation**
Request for ABG, home $O_2$ evaluation, call rapid response team if worsening condition.
**Thank you**
Remember to thank the patient for them allowing you to provide their care.

Appendix B

Patients Binder Bedside Report Insert

**How will we enter the room?**

We will enter the room by knocking on the door, even if it is open. Your room is your personal

space and we wish to respect your space and privacy.

**What will occur at the beginning of the shift?**

We will introduce ourselves to you by name and title. We will ensure you understand what our

roles will be in your care.

**What occurs during "Change of Shift Report"?**

Exchange of information about your history and hospitalization between nursing staff and

yourself. This should include diagnosis, pertinent medical history, pertinent physical assessment

findings, laboratory findings or tests, and the plan of care for you. We will do this at your

bedside to ensure complete and accurate information during the bedside report. Please feel free

to be part of this discussion.

Appendix C

Bedside Report Competency Checklist

# Bedside Report Competency Checklist

Date: _____

Name: _____

Department: _____

Evaluator: _____

| INTRODUCTIONS | OBSERVED (Y/N) | COMMENTS |
|---|---|---|
| Knock on door prior to entering. | | |
| WASH HANDS/Foam in | | |
| Manage up – off-going nurse will introduce & manage up, using SBART format, the oncoming nurse & PCA. | | |
| Use good eye contact. | | |
| EXPLAIN BEDSIDE HANDOFF BEFORE REPORT | | |
| Explain the purpose of bedside report. | | |
| Use key words "very good" care. | | |
| If visitors are at the bedside, ASK patient if visitors should leave prior to information exchange to maintain HIPAA regulations. | | |
| SAFETY | | |
| Both nurses check name and allergy bands prior to any care, using key words "for your safety". | | |
| Inform armband check by all staff prior to any care, tests or treatments. | | |
| Bring patient into conversation. Encourage to express concerns. Do not talk around patient. | | |
| Check IV sites, solution & tubing. | | |
| INFORMED | | |
| Update nurses, date, goals for the day & return time on whiteboard. Use laymen's terms. | | |
| Use key words "keep you informed", plan of care, tests & treatment, etc. | | |
| Ask, "What questions may I answer?" | | |
| ADDRESS THREE Ps: PAIN..POSITION..PERSONAL NEEDS | | |
| How have we been managing your pain? | | |
| Are you comfortable? | | |
| Do you need to go to the bathroom? | | |
| ASSESS ENVIRONMENT | | |
| Move items within reach (table, call light, TV remote, phone, water, & garbage can.) | | |
| CLOSING – THANK YOU | | |
| Inform when they will round again. | | |
| Is there anything else I can do for you? | | |
| Thank you for allowing us to provide your care. | | |
| WASH HANDS/Foam out. | | |

Appendix D

TRISS Patient Satisfaction Questions

Questions include:

During this hospital stay, how often did nurses treat you with courtesy and respect?

During this hospital stay, how often did nurses listen carefully to you?

During this hospital stay, how often did nurses explain things in a way you could understand?

During this hospital stay, how often did the nurse provide answers to your questions?

Appendix E

Nurse Perceptions of Bedside Report Survey

| Sex: ☐ Male ☐ Female | | | | |
|---|---|---|---|---|
| Years of nursing experience: _____ | | | | |
| 1. Nursing team bedside shift report makes people accountable. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 2. Nursing team bedside shift report provides adequate communication between nursing staff at change of shift. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 3. Nursing team bedside shift report helps me prioritize my workload. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 4. Nursing team bedside shift report allows me to perform shift change medication reconciliation. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 5. Immediately after Nursing team shift report, I am able to communicate with providers regarding patient care. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |

| What are the barriers to conducting bedside report? |
|---|
| |

| What are the advantages to giving bedside report? |
|---|
| |

Appendix F

Survey Use Approval

RE: Bedside Nurse-to-Nurse Handoff

Tuesday, November 22, 2016 8:28 PM

**From:** "Maxson Pamela M. D.N.P. R.N." <maxson.pamela@mayo.edu>

**To:** "'Rachel Greve'" <rcgreve2@yahoo.com>

Rachel,

Good luck with your DNP capstone project. You have full permission to utilize the questionnaires. If you have further questions, please feel free to reach out.

Best Regards,
Pam

-----Original Message-----
From: Rachel Greve [mailto:rcgreve2@yahoo.com]
Sent: Tuesday, November 22, 2016 12:20 PM
To: Maxson, Pamela M., D.N.P., R.N.
Subject: Bedside Nurse-to-Nurse Handoff

Good Afternoon Dr. Maxson, My name is Rachel Greve, I am an Army Nurse currently stationed in Germany. I am working on my DNP at University of Maryland and as my capstone project I am implementing patient-centered bedside handoff on the medical-surgical unit. I frequently refer to your article published in MedSurg Nursing in 2012 and am very interested in your patient and nurse questionnaires for my EBP project.

I wanted to write to you to ask permission to utilize these questionnaires' and of course thank you for the work you have done in this field. Please let me know the steps I need to take to obtain permission from yourself as well as the other authors.

Respectfully, Rachel C. Greve RN, MSN, ACNS-BC rcgreve2@yahoo.com

Appendix G

Patient Perceptions of Bedside Report Survey

Length of Stay_____

| 1. I was informed of my plan of care for the day. | | | | |
|---|---|---|---|---|
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 2. There was open communication between members of the nursing team about my plan of care. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 3. I was satisfied with the amount of input I was able to give about my plan of care. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 4. My nurses worked together as a team. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 5. The report given between nursing team members was given in a professional manner. | | | | |
| Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
| 6. The report given between nursing team members was given in a confidential manner. | | | | |
| Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly agree |

| Comments |
|---|
|  |

Appendix H

Timeline

Submit to committee members and present proposal November 2016

Submit proposal to IRB before December 2016

Implement project January through April 2017

Analyze/synthesize evaluate data September 2017

Submit final scholarly project manuscript to committee for review by October 2017

Present final scholarly project report to committee November 2017