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THE IMPACT OF BEDSIDE REPORTING ON PATIENT SAFETY EVENTS, PATIENT SATISFACTION, AND NURSE ACCOUNTABILITY IN A PEDIATRIC UNIT

By

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Submitted to the Faculty of the Graduate College of Arkansas Tech University in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE IN NURSING ADMINISTRATION May 2019 © 2019 Ginger McEarl

Abstract

One of the fundamental elements of nursing practice is the transfer of patient information from one provider to another known as a bedside report. However, an unstructured bedside report that occurs away from the bedside, places patient safety, quality of patient care, and patient satisfaction in jeopardy. The purpose of this quality improvement (QI) project is to determine if the implementation of bedside reporting in an acute care pediatric unit will: decrease preventable errors reported through an event reporting system known as Safety Tracker, increase patient satisfaction in provider communication, and improve nurse accountability. The study included a convenience sample of 65 inpatient bedside nurses on a 30-bed, acute care pediatric unit in a large urban hospital. The participants were recruited on a voluntarily basis and informed consent was obtained prior to the study. Data were collected through pre-and postquestionnaires. Each questionnaire included, demographic data and two open-ended questions relating to the new Situation, Background, Assessment, Recommendation (SBAR) bedside handoff reporting tool. Education regarding the pre-and postquestionnaires and the new SBAR handoff reporting tool was provided by the primary investigator. Fifty-five participants, or (85%) completed both questionnaires for comparison. Results of this QI project indicated participants liked the consistency and structure of the new SBAR reporting tool; however, barriers identified were arousing and discussing sensitive information at the patient's bedside. Patient satisfaction scores increased from 68.4% to 75%.

Keywords: bedside shift report, patient satisfaction, SBAR, nurse accountability, quality improvement.

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Chapter I: Introduction

Focus of Inquiry

Effective communication between nurses and healthcare providers is essential in the delivery of safe patient care. According to the Joint Commission (2012), approximately 80% of medical errors are credited to ineffective communication. A bedside report is one of many ways nurses can effectively communicate with the healthcare team. The bedside report is the exchange of patient information and the transfer of responsibility of care from one nurse to another (Bigani & Correia, 2018). Recent studies show that inconsistent nursing bedside reports has been linked with preventable errors and unanticipated events, including serious injuries even death (Bigani & Correia, 2018). One study noted 10%-12% of patients experience some form of harm during their hospitalization, half of those events were believed to be preventable (Agency for Healthcare Research Quality [AHRQ], 2019).

An essential element of nursing practice is to ensure patient information is facilitated in a safe and proficient manner. In many instances, bedside report lacks consistency, structure, and occurs away from the patient's bedside (Cairns, Dudjak, Hoffman, & Lorenz, 2013). Report occurring away from the patient's bedside hinders the opportunity for the patient inclusiveness in developing or revising the plan of care and goals (Cairns et al., 2013). According to the Agency for Healthcare Research and Quality (AHRQ), patients need to be continually updated on their plan of care through nursing bedside reporting (2019). It is important to include the patient in healthcare discussions from the beginning of hospitalization, so they are an active participant in their plan of care. The goal of a bedside report is to improve in the continuity of care, support the exchange of relevant patient information, and promote patient safety (Bigani & Correia, 2018). According to a study conducted by AHRQ, nearly 53% healthcare providers state important information is lost or omitted during handoff reporting (Bigani & Correia, 2018). When handoff reporting occurs without a standardized reporting tool, vital information can be forgotten or excluded. Ineffective communication has been linked to delays in care, readmissions, and adverse events (Bigani & Correia, 2018). When preventable errors occur, healthcare institutions are no longer reimbursed for services provided. These occurrences cost organizations billions of dollars every year (Bigani & Correia, 2018).

Statement of the Research Problem

Interaction and communication between nurses, physicians, and all members of the interdisciplinary team is a vital component of healthcare. A major area of concern is the inconsistency between a patient's interdisciplinary team. Bedside report between providers without the use of a standardized tool increases the risk for preventable errors to occur, decreases patient satisfaction scores, and reduces nurse accountability.

Background and Need of the Research Study

The primary function of a bedside report is to communicate a patient's healthcare clinical status and execute a plan of care between the patient, nurse and the healthcare team. Bedside reporting between nurses and physicians without the use of a standardized tool can be a risky activity as it involves and influences patient safety and quality of care. Failure by the healthcare team to communicate the plan of care adequately only increases the potential risk of harm to the patient (Scheidenhelm & Reitz, 2017). Communication between all members of the interdisciplinary team should be implemented in an efficient and structured manner. In 2006, the Joint Commission addressed this very issue of communication as a National Patient Safety Goal specifically requiring institutions to implement a standardized method during handoff communication (Halm, 2013). Additionally, Cairns et al. (2013) found when patients have an increased number of clinicians involved in their care, it increases the chance for an ineffective bedside report.

Historically, nurses perform bedside report away from the patients' bedside without the use of a standardized tool and without patient or family involvement (Cairns et al., 2013). The Joint Commission has published detailed recommendations to improve handoff communication that contains a standardized reporting process which includes patient and family involvement (Bigani & Correia, 2018). A standardized bedside reporting system not only improves patient safety and helps prevent communication barriers, but it also promotes family-centered care (Tobiano, Whitty, Bucknall, & Chaboyer, 2017). Thus, a standardized bedside reporting process makes communication more reliable, provides consistency and structure, and provides a checklist of important information to convey to the healthcare team (Cornell et al., 2013). When report is given at the bedside by nurses, patients have a greater opportunity to participate in plan of care. Active participation from patients and families during bedside report reduces errors in communication (Cairns et al., 2013). Patients can ask questions, feel involved, and have a sense their voice is being heard. Patients who participated in bedside report felt like nurses listened, explained issues on their level, and treated them with respect (Scheidenhelm & Reitz, 2017).

Purpose of the Study

The purpose of this quality improvement (QI) project is to determine if the implementation of bedside reporting in an acute care pediatric unit would improve preventable errors reported through an event reporting system known as Safety Tracker, increase patient satisfaction scores in relation to provider communication, and improve nurse accountability by utilizing a standardized bedside report.

Researcher's Relationship to the Topic and Assumptions

Registered nurses who work on acute care pediatric units give bedside report in different ways. Assumptions in this project include: all participants in this QI project do not have the same amount of nursing experience caring for the pediatric population, all nurses received the same education regarding this QI project, all nurses who participated in the study had access and time to complete the pre-and post-surveys and required education during work hours, and the participants answered the questions on the surveys truthfully.

Research Question

What is the impact of bedside reporting on patient safety events, patient satisfaction, and nurse accountability in a pediatric unit?

Limitations of the Study

The external validity of this QI project may be reduced due to the sample size and participation in the project. This project was conducted on a 30-bed acute care unit in a large urban pediatric hospital and only had 55 active participants. The survey tool used in this project was self-created and has not been tested previously. The SBAR bedside

reporting tool was created prior to the implementation of this QI project without any assistance or buy-ins from nursing or education staff.

Definition of Terms

Bedside report – The exchange of patient information and the transfer of responsibility of care from one nurse to another (Bigani & Correia, 2018). Additional terms that can be used interchangeably are handoff report, bedside handoff report.

Nurse accountability - A core aspect that supports the professional nursing practice (Nursing accountability, 2014)

Patient Satisfaction Scores – Used for measuring quality in healthcare. These scores affect clinical outcomes, patient retention, and the patient-centered delivery of quality healthcare (Patient satisfaction, 2010).

Preventable errors – An error that causes harm by an identifiable and variable agent (Preventable error, 2012). Preventable errors specific to this study include: incorrect medications given to patients, IV tubing and fluids not labeled, IV's infusing at the incorrect rate, etc.

Safety Tracker – A data aggregation system that enables users to manage workplace health, safety and environment (WHSE) data including workplace incidents and hazards, and quality non-conformances/defects (Safety Tracker, 2015).

Situation-Background-Assessment-Recommendation (SBAR) – A standardized tool used to help to facilitate effective communication between health care professionals in relation to reporting (Blom, Petersson, Hagell, & Westergren, 2015).

Summary

This QI project was conducted to determine if the implementation of a bedside report would decrease preventable errors related to ineffective communication, increase patient satisfaction scores, and nurse accountability. Effective communication between nurses and healthcare providers during bedside report is a vital component to the continuity and delivery of safe patient care. Often, important information is lost with inadequate transfer of accountability during patient bedside report (Chapman et al., 2016). When information is lost or omitted, preventable errors increase, patient satisfaction and nurse accountability decreases. It is imperative organizations help facilitate effective communication among the healthcare team. This in return will decrease preventable errors and increase patient safety thus, meeting the Joint Commission National Safety Goal.

Chapter II: Literature Review

The purpose of this QI project is to identify how bedside reporting impacts patient safety events, patient satisfaction scores, and nurse accountability in an acute care pediatric unit. Nursing bedside report is intended to provide accurate and timely communication between care providers. However, with each handoff report, the likelihood of encountering lost or missing information increases (Cairns et al., 2013). While reviewing patient satisfaction scores, safety events, and survey responses, an evidence-based practice framework, specifically the IOWA Model, is chosen for this quality improvement project. This model is beneficial in developing education and improvement practices. Bedside shift report, patient satisfaction, SBAR, and nurse accountability were the search terms entered into CINAHL database used for this literature review. This chapter explores current literature on how bedside reporting impacts patient safety events, patient satisfaction, and nurse accountability in an acute care pediatric unit.

Conceptual Framework

The IOWA Model of Evidence-Based Practice (EBP) was selected as the conceptual framework of this project to promote excellence and quality of care (Buckwalter et al., 2017). It is known as a heuristic model, meaning it uses practical methods to reach a goal. It was developed by nurses based on Roger's (1983) theory, Diffusion of Innovations, and was an extension of the Quality Assurance Model (Buckwalter et al., 2017). Evidence-based practice serves many purposes in the healthcare field, such as, improving patient safety, quality of patient care, and helping to control costs. Evidence-based models help not only nurses, but other providers to

incorporate best evidence into actual clinical practice (Brown, 2014). Evidence-based practice is known to help find solutions to clinical problems that incorporates best indications, clinician's expertise, and patient's ideas and beliefs (Brown, 2014).

The IOWA Model of EBP is widely known and uses a logical method to determine the effect of evidence-based practice on patient and healthcare organizational outcomes (Buckwalter et al., 2017). The IOWA Model of Evidence-Based Practice is outlined in a multi-step process. The first step in the IOWA Model is to identify triggering or trending issues which need improving. Once problems are identified, the topic must be determined if it is a priority for the specific unit or organization. If the trend is deemed a priority, a team is formed to gather, analyze, and decide if there is enough evidence to proceed with the project. After the evidence is collected, then the specified unit(s) can pilot the change. If the pilot phase is successful, the next step is to adopt the practice change. The final phase of the IOWA Model of Evidence-Based Practice is maintaining and sustaining the practice change (Buckwalter et al., 2017).

A major benefit of the IOWA Model of Evidence-Based Practice is the promotion of better patient outcomes in the healthcare setting. Prior to the implementation of this quality improvement project, issues were identified that put patient's safety at risk. On the acute care pediatric unit, nurses give handoff report away from the patient's bedside without using a standardized reporting tool. Preventable errors were occurring, patient satisfaction scores regarding provider communication were lower, and nurse accountability had decreased. These issues were identified as a priority for the acute care pediatric unit. The primary researcher gathered, investigated, and evaluated data to determine if there was enough evidence to proceed with the QI project. In collaboration

with the Director of the acute care pediatric unit, the primary investigator implemented a change that consisted of performing report at the patient's bedside with the use of a standardized bedside reporting tool. The last two steps from the IOWA model are still ongoing. However, by using this model for this research project, trends such as an increase in preventable errors, decreased patient satisfaction scores, and nurse accountability were identified, and it was concluded this topic was a priority as it was affecting quality of patient care and safety. The issues identified were in opposition to the organization's vision and strategic plan which would be best addressed using the IOWA model of Evidence Based Practice.

Review of the Literature

This literature review will focus on three main topics involving the impact of bedside reporting on patient safety events, patient satisfaction, and nurse accountability. One of the most crucial duties of a nurse's daily patient care routine is receiving handoff report. In order to provide quality care to their patients, an accurate exchange of patient information is essential (Labriole, 2018). The handoff report is highly significant as it marks the transference of a nurse's responsibility to the patient by the exchange of patient information for the continuation of patient care (Bigani & Correia, 2018). The literature reveals that the key to patient and family-centered care begins with good communication between the patients and providers (Bigani & Correia, 2018). Fundamental characteristics for good communication between patients and providers include presenting information in a consistent and structured manner, involving the patient and family, and performing report at the patient's bedside (Scheidenhelm & Reitz, 2017). Handoff report occurring at the patients' bedside has been recognized as vital to

efficiently communicate healthcare information between patients and providers (Sadule-Rois, 2017). Handoff report occurs at a minimum of twice a day during a work shift where patient care is transferred between two nurses. However, various specialties are often involved during this report, and a large amount of information is shared and received (Cornell et al., 2013). Chapman et al. (2016) found when there are gaps in communication between providers, preventable errors occur, patient satisfaction decreases, and nurse accountability declines.

Patient Safety Events and Preventable Errors

There are several reasons as to why gaps in handoff communication occur. One reason is organizations have different experience levels of nurses from novice to expert who have different communication styles, skills, abilities, and experiences which can result in process inconsistencies (Cairns et al., 2013). An experienced nurse may be under the assumption peers have knowledge regarding certain diagnoses, when that is not the case. Studies show handoff report occurs in an inconsistent manner established on the design and preference of the individual (Cairns et al., 2013). On a routine basis, nurses must adjust to their peers' report style and pattern. Often, gaps in a handoff report are due to disorganization and inconsistency (Cairns et al., 2013). When handoff report is disorderly and unstructured, nurses tend to convey unnecessary information, which can lead to increased handoff report times (Cornell et al., 2013).

Disturbances during handoff communication is another reason for an increase in patient safety events. When handoff report is frequently interrupted and distractions occur, communication failure happens (Cairns et al., 2013). Some interferences during handoff report include call light usage and telephone calls. Many times, this causes

handoff report to be unstructured, inaccurate, and missing key information (Cornell et al., 2013). Disturbances can lengthen report times and cause the oncoming nurse to get behind when starting their shift. In addition, the oncoming nurse may forget to ask important questions during report that can result in patient errors. When questions go unanswered, it can be a challenge to confront situations related to patient care without having the correct information (Cairns et al., 2013).

Another important factor related to patient safety events regarding miscommunication is that handoff report typically occurs away from the patient's bedside. When report is given away from the bedside, the patient and family are not included in the plan of care (Cairns et al., 2013). The Joint Commission and the Institute for Patient-and Family-Centered Care believe having the input of patients and families during handoff reporting is a fundamental safety element as it aides in building relationships and enhances effective communication (Bigani & Correia, 2018). Research shows when patients are active during handoff report, this decreases errors in communication and duplication of services (Cairns et al., 2013). When patients are involved in their care and in handoff reporting, their care has less errors and is more complete. Additionally, when nurses use a standardized reporting handoff tool, patient safety events and preventable errors decrease (Scheidenhelm & Reitz, 2017).

Using a Structured Reporting Tool

Cornell et al. (2013) conducted a quantitative study that included 75 inpatient bedside nurses working on four different medical-surgical units of a 339 bed, midsouth suburban hospital. The purpose of this study was to assess the impact and value of SBAR in shift reports. SBAR (Situation, Background, Assessment, Recommendation) is

a tool used to improve the efficiency of communication between individuals (SBAR, 2013). Direct observation was the instrument utilized in this study. A comprehensive protocol was developed and included the recordings of four variables: nurse tasks, tools, collaborators, and location of work. Five hypotheses were proposed prior to the start of the study, three of which were supported.

Cornell et al. (2013) suggest the configuration and content of SBAR provides concise and reliable communication. It follows the recommendations of The Joint Commission (2012) by providing standardization and consistency. The study limitations included lack of information nurses scripted on informal forms or cheat sheets. The information written on the cheat sheets would identify SBAR shortcomings and offer insight on what needs to be added to the SBAR reporting tool. In conclusion, SBAR provides structure, accuracy, and is a comprehensive tool. This tool provides a structured checklist with a review of systems for nurses to discuss during handoff report by sharing information that was not always documented. It enabled all nurses to report equally to one another, regardless of nursing experience. The SBAR protocol will assist organizations to achieve The Joint Commission (2012) goals and improve handoff reporting and communication between patients and all interdisciplinary team members (Cornell et al., 2013).

Cairns et al. (2013) conducted a study on a 23-bed inpatient trauma unit in a large, tertiary academic hospital in southwestern Pennsylvania. The purpose of this project was to evaluate the redesign of a shift handoff report on effectiveness and efficiency as measured by the amount of end-of-shift overtime, frequency of call light usage during change-of-shift, patients' perceptions of its effects on limitations identified in the existing

method of automated shift report. The framework used for this project was the W. Edwards Deming's Plan-Do-Study-Act (PDSA) model.

An anonymous seven-question survey was developed and administered to the nurses on an inpatient trauma unit three months before and three months after bedside shift report implementation. Respondents used a 5-point Likert scale to determine how they agreed or disagreed with questions related to the bedside shift report. The survey results concluded positive relationships between all categories. Study limitations included the sample size, duration of the study, generalizability, and validity of employee responses. Cairns et al. (2013) found that the implementation of a standardized bedside handoff reporting tool resulted in reduction in overtime and call light usage during handoff reporting and an increase in patient satisfaction.

Patient Satisfaction

The solution to patient-centered care and improved patient satisfaction scores is to provide effective communication between patients and providers. However, effective communication can be relayed in many ways. Patients need to be involved in their plan of care. Not only is this just, it is a recommendation made by The Joint Commission (Scheidenhelm & Reitz, 2017). It is important for information to be explained in lay terms for patient understanding. It is imperative that all members of the healthcare team use clear and concise communication with patients so they know what is occurring and why (Sadule-Rois, 2017). When patients and families are involved in their care, it improves the relationships between patients and the healthcare team, and when patients have a good rapport with their healthcare team and they are involved in their own care, patient satisfaction scores increase (Bigani & Correia, 2018).

An additional approach to enhance communication between patients and providers to help improve patient satisfaction is a consistent and systematic reporting process utilized by nurses. A standardized approach to handoff report can improve patient safety, outcomes, and patient satisfaction (Schiedenhelm & Reitz, 2017). Performing handoff report at the bedside improves patient and family satisfaction scores in many ways. Furthermore, a handoff report not only includes a verbal condition report but also a safety check of the patient's identity and environment. A safety check involves both the off-going and oncoming nurse reviewing together the patient's medication list, identification band on the patient, call light within the patients reach, IV site not damaged or impaired in any form, and all necessary medical equipment, e.g. Yankauer tool used for suctioning (Schiedenhelm & Reitz, 2017). Patient safety is a top priority for every medical organization. Schiedenhelm and Reitz (2017) found patients feel safer when handoff report was given at the bedside with a safety check. In addition, patients feel they can ask questions and clarify any inaccuracies (Schiedenhelm & Reitz, 2017). A case study conducted by Sadule-Rois (2017) found bedside reporting helps decrease patient anxiety and gives them an opportunity to connect with their nurse and be more involved in their care.

Schiedenhelm and Reitz, (2017) conducted a quasi-experimental, between-group, pre-implementation and post-implementation comparison of patient satisfaction scores from returned surveys on two units in a 149-bed community hospital in Illinois. The units included a 46-medical-sugical unit and a 12-bed obstetrics unit. The purpose of this project was to increase nurse compliance with bedside report and increase patient satisfaction scores. Tools from Studer Group Toolkit and Press Ganey patient surveys

were used in this study to measure patient satisfaction scores and ensure the patients receive the highest quality of care.

A total of 579 patient surveys were returned from the pre-and postimplementation time period. Patient satisfaction improved on all four statements on the medical-surgical unit. On the obstetrics unit, patient satisfaction mean score improved on one of the questions and decreased slightly on two of the statements. However, the obstetrics unit had a higher compliance in the pre-implementation phase, which may explain the difference in improvement. The findings suggest that bedside handoff report improves patient satisfaction scores with nurse communication. The researchers used Lewin's theory of planned change for the framework of this study. Study limitations included the lack of generalizability and compliance process. The nurses in this study were observed randomly so it is difficult to know if they followed the correct procedure every time. In conclusion, the Schiedenhelm and Reitz (2017) study was significant because it shows how crucial it is to provide resources and support to nurses during times of transition.

Nurse Accountability

Every time handoff report is exchanged from one nurse to another, there is the potential for miscommunication to occur (Tobiano et al., 2017). Without the use of a consistent reporting tool or system, essential information can be excluded. Other barriers include disruptions and disturbances that occur during shift report, which have the potential to result in a breakdown in communication (Cairns, et al., 2013). As nurses are distracted and patient care questions go unanswered, these interruptions could result in unintentional patient harm.

Tobiano et al., (2017) conducted a cross-sectional survey, administered to 200 nurses working on medical wards in two tertiary Australian hospitals, one private and one public. The medical wards included areas of cardiology, general medicine, hematology and oncology, mixed surgical and medical, neurology and stroke, renal, and respiratory. The purpose of this research study was to explore and understand barriers nurses perceive in undertaking bedside handoff report.

Data were collected through a survey using open-ended questions asking about barriers related to bedside handover report. Demographic data were also collected for this study. The open-ended questions were answered by 88% (n=176) of the participants. From the survey data, three categories were identified as sharing report in front of others, disruption of communication flow, and patient's ability to participate due to their medical conditions. Findings from this study suggested these identified categories would influence the success of bedside handoff report. One limitation of the study was the use of surveys instead of interviews to collect data for open-ended questions which decreased the ability to assess for a deeper understanding of individual answers. Another limitation was that the barriers identified by the participants could have been influenced by the context of the questions asked. Tobiano et al. (2017) concluded nurses had issues with privacy, such as, sharing sensitive information at the bedside, communication work flow or external interferences, and individual characteristics whether it be waking patients or their medical condition, interfered with bedside handoff report (Tobiano et al., 2017). This study confirmed the advantages of using a determinant framework in developing approaches for attaining practice recommendations. Managers need to address

misconceptions with nurses regarding these barriers and demonstrate how bedside handoff report could improve nursing practice.

Another topic associated with nurse accountability is nurses' perceived barriers to handoff report. Some of the perceived barriers include giving and receiving handoff report from too many nurses, experiencing interruptions, breaching confidentiality, and awakening patients (Schiedenhelm & Reitz, 2017). When barriers are confronted, nurses can begin to realize that bedside handover report addresses the patient's concerns, needs, and preferences (Tobiano et al., 2017). Recognizing and understanding barriers is an essential course of action in any organization when implementing a change such as bedside handoff report (Tobiano, et al., 2017). Handoff report has been identified as a method to decrease risks pertaining to misinterpretations and unclear information (Tobiano, et al., 2017).

Literature Review Summary

The main function of a bedside handoff report is to communicate pertinent patient information from one individual to another (Scheidenhelm & Reitz, 2017). When communication is unstructured, patient safety and the quality of patient care is impacted. When nurses perform safety checks, it will help decrease preventable errors when integrated during handoff report (Bigani & Correia, 2018). In addition, patients and caregivers need to be involved in their care to improve communication and patient satisfaction scores. When they are included and report is given at the bedside, patient satisfaction scores have improved (Bigani & Correia, 2018). A standardized handoff reporting tool not only improves communication, but it also promotes critical thinking skills and improves nurse's situational awareness (Cornell et al., 2014). When nurses

perform handoff report at the bedside, it increases patient safety, decreases communication failures, and promotes patient-centered care (Tobiano, 2017). Using the IOWA Model of Evidence-Based Practice was effective for this QI project. It helped identify issues occurring on the acute care pediatric unit, which were affecting patient safety and quality of care. The findings in the literature supported the need for this QI project as evidenced by the need for a standardized handoff reporting tool and involving patients and caregivers in their care. Organized communication between all members of the healthcare team is the key to decrease preventable errors, improve patient satisfaction, and increase nurse accountability.

Chapter III: Methodology

Effective communication between nurses during handoff report is a vital component to the continuity and delivery of safe patient care. Often, important information is lost with inadequate transfer of accountability during patient handoff (Chapman et al., 2016). When information is lost or omitted, preventable errors increase, patient satisfaction and nurse accountability decreases. This chapter discusses the research design, setting, participants, instruments utilized, and how the data were collected and analyzed.

Research Design

The purpose of this quality improvement project is to identify how bedside reporting impacts patient safety events, patient satisfaction, and nurse accountability in an acute care pediatric unit. A QI project is defined as, "a systematic, formal approach to the analysis of practice performance and efforts to improve performance" (Quality Improvement, 2019). On the acute care pediatric unit, preventable patient safety events are increasing and patient satisfaction scores regarding provider communication are decreasing. The QI project followed a structured methodology as follows. The primary investigator developed a self-created handoff reporting tool that will be implemented by all inpatient bedside nurses on the acute care pediatric unit. Additionally, nurses will perform handoff report at the patient's bedside with patient and caregiver involvement. The primary investigator reviewed and evaluated the patient safety events reported in a system known as Safety Tracker. Furthermore, National Research Health Corporation, (NRC) patient satisfaction scores and nurse accountability were evaluated to determine

how bedside reporting would impact patient safety events, patient satisfaction, and nurse accountability in a pediatric unit.

Setting

The setting chosen for this QI project was an acute care pediatric medical-surgical unit at a large urban children's hospital located in the South. The hospital is a 356-bed pediatric teaching hospital which provides care to patients from birth to 21 years of age. The acute care medical-surgical unit is a 30-bed unit that provides care to children from birth to the age of three, which includes various medical diagnoses, with an emphasis on tracheostomy and ventilated children.

Population/Sample

The population of interest for this QI project was all inpatient bedside nurses who work within the acute care pediatric unit. Currently, there are 65 inpatient bedside nurses employed on this unit. A convenience sample was used to recruit participants verbally via face-to-face communication. These participants were recruited on a voluntary basis and informed consent was obtained prior to the implementation of this project. The inclusion criteria for this quality improvement project included being an inpatient bedside nurse on the acute care pediatric unit. All 65 inpatient bedside nurses were asked to take part in the project, with 55 inpatient bedside nurses completing the project.

Human Subjects

The application for review of human participants research was completed by the primary investigator and submitted to Arkansas Tech University's and Arkansas Children's Hospital Institutional Review Board (IRB). The IRB application also included as attachments the study description outline, informed consent, participant invitation,

letters of permission, SBAR reporting tool, a copy of the survey instrument used in the project, and a letter of confidentiality from the hospital. The IRB application precisely listed the purpose and objectives of the project, proposed methodology, risks, costs, and benefits related to the project, informed consent process, data collection, and dissemination of findings. The application was approved as a quality improvement project by Arkansas Children's Hospital IRB committee on October 11, 2018 and Arkansas Tech University's IRB committee on October 22, 2018.

Participation in the project was voluntary and guaranteed to the greatest extent possible to be anonymous and confidential. Informed consent was obtained by face to face explanation of a written consent form (see Appendix A). All collected survey data and consent forms were secured under lock and key by the primary investigator in the management team's office in a locked filing cabinet. Furthermore, the participants were given the contact name and number of the primary investigator, with instructions to contact with any project questions.

Instrumentation

An eight-question survey was created to collect pre-and post-data that measures the need for a standardized handoff reporting tool. The survey questions were structured to facilitate the evaluation of the standardized handoff reporting tool that was created. The survey was the same to collect both pre-and post-data. Among the eight survey questions, two were intended for written responses (see Appendix B). The survey collected demographic information on gender, age, ethnicity, how long employed at the hospital, educational level of the RN, whether the nurse held a national certification, along with two open-ended questions asking: (a) What are the advantages of the new

SBAR handoff reporting tool and (b) What are the barriers or disadvantages of the new SBAR handoff reporting tool.

Additionally, a self-created SBAR handoff reporting tool was used as a structured guide during handoff report at the patient's bedside (see Appendix C). SBAR (Situation, Background, Assessment, and Recommendation), is a tool that provides a framework which helps facilitate communication between all members of the interdisciplinary team (IHI, 2019). Currently, SBAR is the communication tool used for nurse to physician reporting within the organization. For this project, a SBAR reporting tool was modified from the article *Impact of SBAR on Nurse Shift Reports and Staff Rounding* to best fit the population seen on the acute care pediatric unit. The SBAR handoff reporting tool consists of pertinent patient information such as the patient's name, diagnosis, past medical history, name and phone number of the caregiver, vital signs, diet, any lines or tubes, medications, and any consults the patient may have. The SBAR handoff reporting tool was created to add specific details such as allergies, code status, barriers to communication, wounds, pain, and any nurse reminders that will help make communication more consistent and relevant during nursing handoffs.

National Research Corporation Health (NRC) patient satisfaction survey was another tool utilized in this research project. NRC is a company based in Nebraska that focuses on gathering large amounts of healthcare customer data and manages patient satisfaction scores (NRC Health, 2019). NRC partners with healthcare organizations to help them better understand the customers they care for and serve. Once a patient is discharged from the hospital, they receive a 16-question survey regarding their stay at the hospital. Of the 16 questions, seven focus on communication between providers, staff,

and caregivers. The benchmark regarding patient satisfaction for the organization is set at 85%. This QI project utilized the NRC patient satisfaction scores in relation to provider communication.

The Safety Tracker system is a tool utilized on the acute care pediatric unit and throughout the organization to report patient safety events. This system also helps the organization identify patient safety trends occurring on not only specific units but also hospital wide. Any employee within the organization can enter an event into the Safety Tracker system. When an event is entered into the Safety Tracker system, members of the Quality and Improvement Department sort through the events and classify them. They work with the members of the management team of each unit to help determine the cause of the events and discuss ways to help decrease these errors from occurring. The categories for reportable events include, falls, airway management, IV access device, medication/fluid, diagnosis/treatment, infection, laboratory, line/tube, patient ID/consent, safety/security, and skin/tissue. The areas that were evaluated for this QI project include: airway management, diagnosis/treatment, IV vascular access device, and medication/fluid. The Safety Tracker system is not meant to be punitive but to help all members of the interdisciplinary team provide safer care to patients.

Data Collection

Prior to the implementation of this research project, education was provided via a power point presentation, presented during educational rounds on the acute care pediatric unit, recorded live and posted to acute care pediatric unit's Facebook page. During the educational sessions, participants were given information regarding the pre-and postquestionnaire, informed consent, new SBAR bedside handoff reporting tool, duration of

the project, and the purpose of the project. After the education session, participants completed pre-surveys and informed consent was obtained. The project was implemented from December 3, 2018 to January 7, 2019. During this time, nurses performed handoff report at the patient's bedside with the new standardized SBAR handoff reporting tool. Data were collected from pre-and post-surveys. The data collection for the pre-surveys began December 10, 2018 and on January 14, 2019 for the post-surveys. Patient safety events reported in the Safety Tracker system were collected and reviewed to detect common themes prior to the implementation and at the completion of this QI project. NRC patient satisfaction scores were also evaluated pre-and post-implementation to determine if there was an increase or decrease regarding provider communication.

Data Analysis

Demographic data were analyzed in Microsoft Excel by classifying each participant's data in the following categories: gender, age, ethnicity, years employed at the hospital, RN education level, and certification. Surveys were reviewed and analyzed to get a clear understanding of the nurse's view of the advantages/likes and disadvantages/dislikes of the new bedside handoff reporting tool. Direct quotes from the two open-ended questions on the surveys were highlighted to identify common themes. The primary investigator worked with the quality department of the institution to review and analyze common safety events occurring on the acute care pediatric unit. Safety event reports from the previous six months were evaluated to identify common safety themes occurring on the unit. The collected safety themes were placed in the following categories: airway management, diagnosis/treatment, IV/vascular access device,

medication/fluid. The events ranged from wrong sized equipment at the bedside, inaccurate medication or fluid rate, to incorrect labeling of IV's. Once the project was completed, Safety Tracker events were reviewed and compared to the previous data to determine if there was a decrease in events listed in the common themes. Along with patient safety events, patient satisfaction scores, produced by National Research Health, (NRC), were reviewed from September through November 2018. "Good communication between staff" category was evaluated before the implementation and after the completion of the QI project to determine if utilizing a standardized reporting process and bedside handoff report increased the scores regarding provider communication.

Summary

The focus of this QI project was to determine if the implementation of bedside shift reporting in an acute care pediatric unit would decrease preventable errors reported through an event reporting system known as Safety Tracker, improved patient satisfaction scores, and increase nurse accountability. Data were collected from pre-and postsurveys. The pre-and post-surveys collected demographic data along with two openended questions asking all participating inpatient bedside nurses working on the acute care pediatric unit the advantages and disadvantages of the new bedside handoff reporting tool. Patient safety events reported through Safety Tracker and patient satisfaction scores regarding provider communication were also evaluated. IRB approval was obtained from Arkansas Tech University and Arkansas Children's Hospital. Individuals participated on a voluntary basis and informed consent was acquired prior to the distribution of the presurvey.

Chapter IV: Results

The purpose of this QI project was to determine if the implementation of bedside reporting impacts patient safety events, patient satisfaction scores, and nurse accountability in an acute care pediatric unit. Data were collected from pre-and postpaper questionnaires, patient safety events reported through a Safety Tracker system, and patient satisfaction scores gathered by NRC. This chapter will discuss the results of this QI project.

Findings

Participants in this QI project were asked to complete a pre-and post-paper questionnaire consisting of eight questions. The pre-and post-questionnaire collected the same data from the participants. The questionnaire included demographic data and two open-ended questions, which were meant for written responses. The open-ended questions pertained to the advantages and disadvantages regarding the use of the new standardized SBAR reporting tool at the patient's bedside during handoff report. The implementation of this QI project began on December 3, 2018 and concluded on January 7, 2019. A total of 65 registered nurses working on the acute care pediatric unit were invited to participate in this study. A total of 55 individuals completed both pre and post questionnaires, which was a participation rate of 85% (see Table 1).

Total: 55 Participa	nts				
Gender					
Female		Male			
53		2			
Age					
<25	26-49	50-64	>65		
15	30	9	1		
Ethnicity					
Asian	Hispanic/Latino	Caucasian	African American	Native American	Other
1	1	48	5	0	0
Years at ACH					
Years at ACH Ranged from 1 to 3	30 years				
Years at ACH Ranged from 1 to 3	30 years				
Years at ACH Ranged from 1 to 2 RN Level	30 years				
Years at ACH Ranged from 1 to 3 RN Level RN Level I	30 years RN Level II	RN Level III	RN Level IV	RN Level V	
Years at ACH Ranged from 1 to 3 RN Level RN Level I 6	30 years RN Level II 30	RN Level III 13	RN Level IV 6	RN Level V 0	
Years at ACH Ranged from 1 to 3 RN Level RN Level I 6	30 years RN Level II 30	RN Level III 13	RN Level IV 6	RN Level V 0	
Years at ACH Ranged from 1 to 3 RN Level RN Level I 6 Certification	30 years RN Level II 30	RN Level III 13	RN Level IV 6	RN Level V 0	
Years at ACH Ranged from 1 to 3 RN Level RN Level I 6 Certification Yes	30 years RN Level II 30 No	RN Level III 13	RN Level IV 6	RN Level V 0	

Table 1. Demographics from Questionnaires

Table 1 displays the first six questions from the survey. In the gender category, females had the most participation with 96%. The most participation in the age class was 26-49 with 55%, then <25 with 27%, and 50-64 with 16%. Caucasian ethnicity had the most input with 87%, then African American at 10%. In the RN level grouping, level II lead with 55%, level III at 24%, and levels I and IV tied with 11%. The certification category was close with the answer "No" at 55% and "Yes" at 45%. The age of registered nurses working on the acute care pediatric unit ranged from 1 year to 30 plus years.

Pre-Questionnaire Open-Ended Question

For the pre-questionnaire, the first open-ended question asked, "What are the advantages of the new SBAR handoff reporting tool?" While there were multiple

answers, common themes emerged. Most participants liked the tool because it was "standardized, consistent, informative, and an organized layout that was easy to follow." Another common trend identified was "it includes families and decreases the incidences of miscommunication." Furthermore, participants liked the new SBAR handoff reporting tool because "it kept communication lines open with the patients and families and it promoted factual versus subjective information." Additionally, a participant noted, "this tool makes nurses more accountable, decreases errors, by including the families, it increases patient satisfaction."

The second question on the pre-questionnaire asked, "What are the barriers or disadvantages of the new SBAR handoff reporting tool?" Since the implementation of this QI project was on an acute care pediatric unit, the most common theme identified was, "not wanting to wake patients or caregivers up for report." Another theme noted was, "giving report at the bedside is sometimes difficult especially when there is sensitive information involved." The SBAR handoff reporting tool not being updated and not being followed by all staff members was another common trend. Furthermore, participants in this project reported "a change in general, going back to paper from using the computer, and longer report times" were barriers of the SBAR handoff reporting tool.

Once the implementation of the QI project was completed over a period of six weeks, the participants were asked again to complete the post-questionnaire. The two open-ended questions on the post-questionnaire posed the same questions as the prequestionnaire. The results from the open-ended questions had very similar responses as identified on the pre-questionnaire. The most common themes were, "the SBAR reporting tool is organized, standardized, and includes the families in their plan of care."

Some participants stated, "safety checks were done correctly," "it helped decrease patient errors," "it helped reduced gossiping," and "had better communication with the patient and families." On the other hand, a few individuals stated, "this tool had no advantages" and "it felt like we took a step back."

The most common themes identified regarding the second question on the postquestionnaire included, "waking patients and parents up, SBAR tool is time consuming and takes longer to give report and utilizing something different." Additionally, "the SBAR reporting tool not getting updated and nurses not participating" was also an identified barrier to the questionnaire. Some nurses felt like they were "double reporting," meaning they would give some of the handoff report at the bedside and sensitive information outside of the patient's room. Again, some participants listed "going back to using paper versus using the computer" as a barrier or disadvantage of the SBAR handoff reporting tool.

Safety Tracker

The reporting of patient safety events that occur on the acute care pediatric unit are entered into a system known as Safety Tracker. The primary investigator worked with members of the quality department of the organization to assess and investigate common safety events from the past six months (see Table 2). Upon completion of the QI project, patient safety events were evaluated and compared with the data to determine if a standardized bedside handoff reporting process reduced the number of safety patient events (see Table 3).

Table 2. Safety Tracker events from dates 6-3-2018 to 12-3-2018, prior to the QI project.



Table 2 indicates patient safety events reported into the Safety Tracker system six months prior to the implementation of the QI project. The common categories and number of errors related to patient safety and preventable errors include: airway management (4 errors), diagnosis/treatment (55 errors), IV/vascular access device (47 errors), and medication/fluid (14 errors). In the airway management category, the events were related to the wrong size tracheostomy tube at the bedside for a tracheostomy dependent patient. The common themes in the diagnosis/treatment category included: incorrect size mask at the patient's bedside, wrong oxygen flow meter at bedside, no weight obtained when ordered, and feeding patients the incorrect amount. Regarding the IV/vascular access device category, expired IV tubing, IV dressing not occlusive, no label or change date on IV or IV tubing, and IV infiltration were the common trends. Inaccurate IV rate and incorrect medications given to patients were the themes identified in the medication/fluid grouping. Overall, the categories examined for this project resulted with the highest errors 45.8% in the diagnosis/treatment and IV/vascular access device being 39%. A total of 120 errors were reported.

Table 3. Safety Tracker events from 1-7-2019 to 2-13-2019, post-implementation of QI project.



Table 3 signifies the patient safety events for one-month post completion of the QI project. The categories related to patient safety events and preventable errors include: diagnosis/treatment (23 errors), IV/vascular access device (11 errors), and medication/fluid (4 errors). The events in the diagnosis/treatment classification included incorrect feed rates and wrong oxygen equipment at the bedside. In the IV/vascular access device category, expired IV tubing, no label or change date on the IV or IV tubing, and IV infiltration were the common themes. Inaccurate IV rate and wrong IV fluid infusing were the common trends in the medication/fluid grouping. Overall, the categories with the highest errors post-implementation of the QI project related to patient safety was in diagnosis/treatment at 67% and IV/vascular device being 32%. A total of 34 errors were reported. While the events in the categories were similar in the pre-and post-implementation phases, overall there was a decrease in reported patient safety events.

Patient Satisfaction Survey

Human understanding

Once a patient is discharged from the hospital, they receive a follow up patient satisfaction survey regarding their hospital stay. These data are composed and produced by NRC which reports back to the hospital providing the patient satisfaction scores. These scores are important as they tell the healthcare providers how well the patient and caregivers were served during their hospital stay. Patient satisfaction scores were reviewed prior to the implementation of this QI project (see Table 4) and evaluated after the completion of the project (see Table 5) to decide if the implementation of a standardized bedside of reporting process increased scores related to provider communication.

Table 4. Patient satisfaction scores from 11-16-2018 to 12-15-2018



Key Metric Dashboard



Key Metric Dashboard

Question Pods Ogranization Names Specialties Providers Time Period ACH Inpatient Infant Toddler Unit All Last 30 days (11/16/18-12/15/18)

Table 4 indicated that patient satisfaction scores regarding provider communication and between staff prior to the implementation of this QI project was 68.4%. The only metric used from the NRC surveys for this QI project was "good communication between staff." During this time, the implementation of this QI project had begun. Nurses started performing a standardized handoff report at the patients' bedside.

Table 5. Patient satisfaction scores from 12-17-2018 to 1-15-2019.





Key Metric Dashboard

Question Pods Ogranization Names Specialties Providers Time Period ACH Inpatient Infant Toddler Unit All Last 30 days (12/17/18-01/15/19)

Table 5 indicates the patient satisfaction scores involving provider communication and communication between staff post implementation of this QI project. The patient satisfaction scores had increased from 68.4% to 75% regarding provider communication and good communication between staff with the implementation of a standardized bedside reporting process.

Summary of Findings

While the participants involved in this QI project had some mixed reviews on the SBAR handoff reporting tool, the findings of this project had positive results and indicated a need for a standardized bedside handoff reporting process. The pre-post-survey results indicated in this project liked the patient and family involvement, standardization, organized, consistency of the new SBAR tool. The barriers of the SBAR tool included waking patients and caregivers up, discussing sensitive issues at the bedside, longer report times, and inconsistency in using the tool. Diagnosis/treatment and IV/vascular access device were the top two categories with the highest number of errors in both pre-and post-implementation phases of the QI project. However, since the completion of this project, there is a decrease in the number of patient safety events on the acute care pediatric unit. Prior to the implementation of this QI project, patient

satisfaction scores regarding provider communication was at 68.4%. Since the implementation of a standardized bedside reporting process, patient satisfaction scores increased to 75%. By using a standardized bedside handoff reporting tool, the outcomes of this project indicated a decrease in patient safety events and an improvement in patient satisfaction scores.

Chapter V: Summary, Discussion, Conclusions, Implications, and Recommendations

Summary

The purpose of this QI project was conducted to identify how bedside reporting impacts patient safety events, patient satisfaction, and nurse accountability in an acute care pediatric unit. All inpatient nurses on the acute care pediatric unit received education via a power point presentation presented during educational rounds by the primary investigator. The presentation was also posted to the unit's Facebook page for the nurses to review who could not attend in person. A pre-and post-questionnaire, NRC, and Safety Tracker system were the instruments utilized in this QI project. Data were reviewed and analyzed to determine common patient safety errors occurring on the acute care pediatric unit and how they impacted patient satisfaction scores.

Discussion

The findings and interpretations of this QI project revealed the need for a standardized bedside handoff reporting process to decrease preventable errors, increase patient satisfaction scores, and improve nurse accountability. The participation rate for this study was high at 85% (N=65). The results for this project were determined by the pre-and post-questionnaire answers, patient safety events reported in Safety Tracker, and patient satisfaction scores gathered by NRC.

The pre-and post-questionnaires contained eight questions. The first six questions collected demographic data and the last two questions were open-ended questions intended for written responses to measure the advantages and disadvantages of the SBAR reporting tool. The questionnaire was the same for both pre-and post-data. The results

from the pre-and post-data had very similar responses. Participants in the study thought the advantages of the SBAR handoff reporting tool were inclusion of the patients and families, standardization, organized layout, and consistency. These findings were supported in the literature. A study conducted by Cornell et al. (2013) revealed a SBAR reporting tool provides structure, consistency, accuracy, and organization to bedside report. In addition, Cairns et al. (2013) performed a qualitative study which determined that a standardized report at the patient's bedside improved the effectiveness of communication between patients and healthcare providers. However, identified disadvantages of the SBAR handoff reporting tool were waking patients and families, discussing sensitive information at the bedside, longer report times, and inconsistency in using the handoff tool. Tobiano et al. (2017) conducted a cross-sectional survey to understand nursing barriers in relation to bedside report. The survey revealed nursing barriers included discussing private information at the bedside, longer time to give report, and "bothering" patients by waking them up. The literature reveals SBAR is a more structured and consistent way to foster dialog between nurses and healthcare providers (Cornell et al., 2014). Additionally, the literature conveys nurses believe privacy issues, disorganized communication, and individual characteristics can hinder bedside handoff report (Tabiano et al., 2017).

Patient safety events reported in the Safety Tracker system were reviewed before and after the completion of this project. The implementation of this QI project included performing handoff report at the patient's bedside. This also includes performing a safety scan or safety check to ensure all the appropriate equipment is at the patient's bedside and functioning properly. The events recorded in the Safety Tracker system were similar

in both the pre-and post-implementation of this QI project. When a standardized bedside report is given, patients report feeling safer and more involved in their care, and there is a decrease errors or inaccuracies (Scheidenhelm & Reitz, 2017). The nurses who participated in this QI project felt the standardized bedside reporting tool helped, "decreased errors by performing a safety check" and "families participated more in the care."

On the acute care pediatric unit, patient satisfaction scores were consistently below the organization's set benchmark. The review of the literature revealed the use of a standardized bedside reporting tool helped improve patient satisfaction scores. Patient satisfaction scores are gathered and produced by the NRC. Prior to the implementation of this QI project, patient satisfaction scores on the acute care pediatric unit was 68.4% regarding provider communication. During the project, nurses used a standardized handoff report at the patients bedside and included the patient and caregivers in the plan of care. After the completion of the study, patient satisfaction scores increased to 75% on the acute care pediatric unit.

Nursing accountability is an issue that many organizations face. A topic associated with nursing accountability on the acute care pediatric unit was the perceived barriers of a standardized bedside reporting process. Often, nurses perform report away from the patient's bedside and at times omit key information related to the patients care. Failure to communicate adequately between healthcare providers could result in patient harm (Chapman et al., 2016). Some barriers noted on the pre-questionnaire was "waking families up," and "discussing sensitive information at the patient's bedside." According to Scheidenhelm and Reitz (2017), the main concern of bedside report is a breach of

patient privacy. While the responses to the questions were similar on the postquestionnaire, nurses did state that they, "liked the consistency and having family involvement" regarding the standardized bedside reporting process.

Conclusions

Recent studies and research articles all identify the need for a standardized bedside handoff reporting process such as SBAR to help decrease preventable errors, increase patient satisfaction, and improve nurse accountability. The findings of this study revealed positive outcomes in all areas related to the project. It is concluded, based on the findings of this QI project, a standardized bedside handoff reporting process is beneficial, and nurses need to continue to utilize this practice. Although the participation rate for this study was considered high at 55 participants of the 65 invited, one limitation was the small sample size. In addition, this QI project was implemented only in one unit of a large, urban hospital. Therefore, the findings are not significant enough to generalize among the entire population. Further research is needed with a larger sample size and more involvement from other units within the institution or at other facilities.

Implications

Research to determine a need for a standardized bedside handoff reporting process is ongoing. It is important to identify and obtain the nurses viewpoints regarding the advantages and disadvantages of a standardized reporting process. While there are nursing barriers regarding a standardized bedside reporting process, education is needed to overcome these barriers and being open to change. Nurses are known to be flexible and to adapt to their ever-changing environment. It is important for hospitals and organizations to consider implementing a standardized reporting process to help decrease

preventable errors and increase patient satisfaction. A review of the current literature indicates a positive relationship regarding utilizing a standardized bedside reporting system in relation to decreasing preventable errors, increasing patient satisfaction scores and improving nursing accountability. The findings of this project identify the ongoing need for a standardized bedside handoff reporting process. While SBAR was chosen for this QI project, there are several other standardized reporting tools available.

Recommendations

Additional research on a standardized bedside reporting process and its relationship to preventable errors, patient satisfaction, and nurse accountability is needed for the pediatric population and setting. Currently, there is a large amount of research associated with this topic; however, most of it includes the adult population and not exclusively pediatrics. A more detailed review of this topic with a pediatric population may yield a different number of responses, which may or may not indicate similar findings. Another recommendation includes surveying the caregivers in addition to the nurses to use as a comparison.

Furthermore, a larger sample size and more involvement from other units within the institution or an outside facility is needed to generalize the findings. Instead of conducting a QI project in one facility, it may be beneficial to perform this study in multiple institutions. Alternate distribution methods of questionnaires should be considered to help increase participation in the project. Additionally, an online questionnaire should be considered instead of the use of paper questionnaires. Hospitals and medical organizations need to review the current literature regarding the benefits of utilizing a standardized reporting tool. Not only does a standardized reporting tool help

decrease preventable errors, it also improves patient satisfaction scores and nursing accountability. Organizations need to be challenged to implement evidence-based practices such as a standardized bedside reporting process to improve patient safety and satisfaction as this will help produce better outcomes for the patient population.

References

Agency for Healthcare Research and Quality (AHRQ). (2019). Adverse events, near misses, and errors. Retrieved from

https://psnet.ahrq.gov/primers/primer/34/Adverse-Events-Near-Misses-and-errors.

- Agency for Healthcare Research and Quality (AHRQ). (2019). Guide to patient and family engagement in hospital quality and safety. Retrieved from https://www.ahrg.gov/professionals/systems/hospital/engagingfamilies/index.html.
- Bigani, D. K., & Correia, A. M. (2018). On the same page: Nurse, patients, and family perceptions of change-of-shift bedside report. *Journal of Pediatric Nursing*, 41, 84-89. doi: 10.1016/jpedn.2018.008.
- Blom, L., Petersson, P., Hagell, P., & Westergren, A. (2015). The situation, background, assessment and recommendation (SBAR) model for communication between health care professionals: A clinical intervention pilot study. *International Journal of Caring Sciences*, 8(3), 530–535.
- Brown, C. G. (2014). The Iowa Model of Evidence-Based Practice to Promote Quality Care: An illustrated example in oncology nursing. *Clinical Journal of Oncology Nursing*, 18(2), 157–159. doi: 10.1188/14.CJON.157-159.
- Buckwalter, K. C., Cullen, L., Hanrahan, K., Kleiber, C., McCarthy, A. M., Rakel, B., ... Tucker, S. (2017). Iowa Model of Evidence-Based Practice: Revisions and validation. *Worldviews on Evidence-Based Nursing*, 14(3), 175–182. https://libcatalog.atu.edu:2217/10.1111/wvn.12223.
- Cairns, L. L., Dudjak, L. A., Hoffman, R. L., & Lorenz, H. L. (2013). Utilizing bedside shift report to improve the effectiveness of shift handoff. *Journal of Nursing Administration*, 43(3), 160-165. Doi:10.1097/NNA.0b013e318283dc02.

- Chapman, Y. L. (2016). Nurse satisfaction with information technology enhanced bedside handoff. *MEDSURG Nursing*, *25*(5), 313–318.
- Cornell, P., Townsend Gervis, M., Yates, L., & Vardaman, J. M. (2014). Impact of
 SBAR on nurse shift reports and staff rounding. *MEDSURG Nursing*, 23(5), 334–342.
- Cornell, P., Townsend Gervis, M., Yates, L., & Vardaman, J. M. (2013). Improving shift report focus and consistency with the situation, background, assessment, recommendation protocol. *Journal of Nursing Administration*, 43(7/8), 422–428. https://libcatalog.atu.edu:2217/10.1097/NNA.0b013e31829d6303.
- Halm, M. A. (2013). Nursing handoffs: Ensuring safe passage for patients. American Journal of Critical Care, 22(2), 158–162. Doi: 10.4037/ajcc2013454.
- Institute for Healthcare Improvement (IHI). (2019). SBAR tool; Situation-backgroundassessment-recommendation. Retrieved from

http://www.ihi.org/resources/Pages/Tools/SBARToolkit.aspx.

- Labriole, J. (2018). Implementing bedside shift report: Walking the walk and talking the talk. *Nursing*, 48(3), 1–4. Doi: 10.1097/01.NURSE.0000529809.90912.30.
- National Research Corporation Health (NRC). (2019). Retrieved from

https://nrchealth.com/about.

- Nurse Accountability. (2014). Defining professional nursing accountability: A literature review. Retrieved from <u>https://www.ncbi.nlm.nih.gov/pubmed/24503314</u>.
- Patient Satisfaction Scores. (2010). Patient satisfaction. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047732/.

Preventable Error. (2012). What is preventable harm in healthcare? A systematic review of definitions. Retrieved from

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3405467/.

- Quality Improvement. (2019). Retrieved from <u>https://www.aafp.org/practice-</u> <u>management/improvement/basics.html</u>.
- Sadule-Rios, N. (2017). Off to a Good Start: Bedside Report. *MEDSURG Nursing*, 26(5), 343–345.
- Safety Tracker. (2015). Retrieved from http://safetytracker.net.au/Fetuures.aspx.
- Situation Background Assessment Recommendation. (2013). Retrieved from

https://www.jointcommission.org/at_home_with_the_joint_commission/sbar_-

a powerful tool to help improve communication.

- Scheidenhelm, S. & Reitz, O. E. (2017). Hardwiring bedside shift report. *Journal of Nursing Administration*, 47(3), 147-153. doi:10.1097/NNA.000000000000457.
- The Joint Commission. (2012). 2011-2012 National Patient Safety Goals. Retrieved from http://www.jointcommission.org/assets/1/18/20112012 npsg_presentation_final 8-14-11.pdf.
- Tobiano, G., Whitty, J. A., Bucknall, T., & Chaboyer, W. (2017). Nurses' perceived barriers to bedside handover and their implication for clinical practice. *Worldviews on Evidence-Based Nursing*, 14(5), 343–349.
 https://libcatalog.atu.edu:2217/10.1111/wvn.12241.

Appendix A

Informed Consent Form

Arkansas Tech University

Title of Project: The Impact of Bedside Reporting on Patient Safety Events and Patient Satisfaction in a Pediatric Unit.

Principal Investigator: Ginger McEarl, BSN, RN, CPN

Other Investigators: Dr. Shelly Randall

Participant's Printed Name:

The Introductory Paragraph

We invite you to take part in a quality improvement project, *the Impact of Bedside Reporting on Patient Safety Events and Patient Satisfaction in a Pediatric Unit,* specifically on the Infant/Toddler Unit at Arkansas Children's Hospital, which seeks to determine if the implementation of bedside shift reporting in an acute care pediatric unit will improve preventable errors reported through an event reporting system known as safety tracker and increase patient satisfaction in provider communication. Taking part in this study is entirely voluntary. If you have any questions regarding this study, contact Ginger McEarl at 501-364-3359. If you decide to participate you must sign this consent form to show that you want to take part.

Purpose of the Research

You are invited to participate in this quality improvement project to improve the quality of care we provide to our patient population. The purpose of this quality improvement project is to determine if the implementation of bedside shift reporting in a pediatric unit, specifically the Infant/Toddler Unit (ITU) will improve preventable errors reported through an event reporting system known as safety tracker and increase patient satisfaction in provider communication. Approximately 65 inpatient bedside nurses are expected to take part in this quality improvement project on ITU at Arkansas Children's Hospital.

Procedures

Participants will be required to answer a pre-survey that includes demographic information and questions regarding the new change-of-shift reporting tool. An education session will be provided by the PI to discuss the new change-of-shift reporting tool. Participants will implement the new change-of-shift reporting tool by completing the tool on each patient they are assigned to every time they work. Implementation will begin December 2018-January 2019, for a 6-week period. Immediately following the implementation period, participants will be required to complete a post-survey related to the change-of-shift reporting tool. Both pre/post survey and new change-of-shift reporting tool was self-created.

Time Duration of the Procedures and Study

If you agree to take part in this study, your involvement will last approximately 40 minutes to complete informed consent, attend or watch an educational presentation, and complete the pre/post surveys.

Discomforts and Risks

Any discomfort or risks of this quality improvement project are considered minimal or nonexistent.

Potential Benefits

Possible benefits to the participant:

The possible benefits you may experience from this quality improvement project includes: improved communication between providers and caregivers, increased patient satisfaction scores, and fewer safety trackers. All of these benefits will help participants know they are providing safe and quality care to their patients and families.

Possible benefits to others:

This quality improvement project will improve the quality of care provided to patients and families and will enhance the communication among caregivers and providers.

Statement of Confidentiality

All information that will be gathered in this quality improvement project will be kept confidential. The survey will have no identifiable information. The information will be stored on my personal computer and maintained for the length of the project. Any electronic data will be password protected. Any reports or publications based on this research will use only group data and will not identify you as being part of this study.

Privacy and confidentiality measures

We will keep your participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your participation in this study. For example, the following people/groups may inspect and copy records pertaining to this research.

- The Office of Human Research Protections in the U. S. Department of Health and Human Services
- The Arkansas Tech University Institutional Review Board

Compensation for Participation

You will not receive any compensation for being in this research study.

Research Funding

There are no grantors, institutions, or companies involved in this quality improvement project through funding or grants.

Voluntary Participation

Taking part in this quality improvement project is voluntary. If you choose to take part in the research, your major responsibilities will include: attending or watching an education presentation, completing a pre/post survey on the new change-of-shift reporting tool, and implementing the new change-of-shift reporting tool. You do not have to participate in this research. If you choose to take part, you have the right to stop at any time. If you decide not to participate or if you decide to stop take part in the research at a later date, there will be no penalty or loss of benefits to which you are otherwise entitled.

Contact Information for Questions or Concerns

You have the right to ask any questions you may have about this research. If you have questions, complaints or concerns contact Ginger McEarl at 501-364-3359 or Dr. Shelly Randall at srandall@atu.edu.

If you have questions regarding your rights as a research participant or you have concerns or general questions about the research, contact Arkansas Tech University IRB chair, Dr. Masanori Kuroki at mkuroki@atu.edu. You may also call this number if you cannot reach the research team or wish to talk to someone else.

For more information about participation in a research study and about the Institutional Review Board (IRB), a group of people who review the research to protect your rights, please visit Arkansas Tech University's IRB web site at <u>www.atu.edu/research/human_subjects.php</u>.

Before making the decision regarding enrollment in this research you should have:

- Discussed this study with an investigator,
- Reviewed the information in this form, and
- Had the opportunity to ask any questions you may have.

Your signature below means that you have received this information, have asked the questions you currently have about the research and those questions have been answered. You will receive a copy of the signed and dated form upon request to keep for future reference.

Participant: By signing this consent form, you indicate that you are voluntarily choosing to take part in this research.

Signature of Participant	Date	Time	Printed Name
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Person Explaining the Research: Your signature below means that you have explained the research to the participant/participant representative and have answered any questions he/she has about the research.

Signature of person who explained this researchDateTimePrinted Name

Appendix B

Questionnaire for new SBAR bedside reporting tool

1.	What is your gender?	Female	Male	e	
2.	What is your age?	<25	26-49	50-64	>65
3.	What is your race?A	sianHi	spanic/Latino	White/C	aucasian
	Black/African American	American	Indian/Native Ar	nerican	Other
4.	4. How many years have you worked at ACH?				
5.	Are you a RN level:I	11	III	IV	V
6.	Do you have a certification?	? If yes, what t	уре?		

7. In your own words, what are the advantages of the new SBAR change-of-shift reporting tool? What do you like about the new SBAR change-of-shift reporting tool?

8. In your own words, what are the barriers or disadvantages of the new SBAR change-of-shift reporting tool? What would you change to make the new SBAR change-of-shift reporting tool better?

Appendix C

C	Patient's Name:	Admit Date:
5	I attent S Name.	Admit Date.
i		
t	Diagnosis:	Age:
u	8	8
а		
t	Team:	DOB:
i		
0		
n	Code Word:	Gender:
11		
P	Allergies:	Caregiver name:
D	C	č
a		
C 1	Medical History:	Caregiver number:
ĸ		
g	Codo Statuci	Domians to communication.
r	Code Status:	Barriers to communication:
0		
u	Isolation:	
n		
d		
Α	Pertinent Vital Signs:	Wounds/Braden Q:
s		
s	XX7 * 1	
3	Weight:	O2/vent settings:
C		
8	Diet:	Size of trach:
S		
m		
e	IV:	Date of trach change:
n		
t		
	I ubes:	Pain:
R	Consults:	
e		
c	Nurse Deminderer	
0	nurse keminders:	
m		
m	Medications:	
e		
n		
d		