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The Impact of Implementing Bedside Report to Transition Patients Across Units

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Walden University

College of Health Sciences

This is to certify that the doctoral study by

Tonya Johnson

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2015

Abstract

The Impact of Implementing Bedside Report to Transition Patients

Across Units

by

Tonya M. Johnson

MSN, Walden University, 2009

BSN, Immaculata University, 2005

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

January 2015

Abstract

Evidence supports bedside report as a mechanism to improve communication, patient safety, quality of report, and nurse and patient satisfaction when implemented in a closed unit. The purpose of this project was to examine the impact of implementing a bedside report process to transition patients from the emergency department to a medical-surgical unit. Specifically, the goal was to analyze the impact of a bedside-reporting process on patient progression and on nurse and patient satisfaction. Lewin's change model provided the theoretical framework for this quasi-experimental study. Patient progression data consisted of 706 patient transitions from the emergency department to the medical-surgical unit. Pre and post implementation survey responses from 87 patients and 61 nurses comprised the patient and nurse satisfaction data. The data were evaluated through multiple *t* test analyses. Patient progression times improved significantly post implementation of the bedside report process ($p < .05$). Nursing satisfaction, quality of report, and safety information were gathered using the Transfer Report Communication Survey. There was statistically significant improvement in survey scores for perceived openness and ease of communication, nurses' perception of the accuracy of information exchanged, and the ability to understand the reported patient information after bedside report was implemented ($p < .05$). Assessment of patient satisfaction via the Hospital Consumer Assessment of Healthcare Providers and Systems survey noted no improvement in patient satisfaction during the project timeframe ($p < .05$). These findings may promote positive social change by improving patient care transitions and improving safety in acute care patient transfers.

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Dedication

This project is dedicated to my family. My husband, Tracy, and three children, Gabby, Noah, and Travis, have supported me every step of the way. They are the reason I was able to succeed even when challenged beyond what I thought I was capable of accomplishing. I thank them for understanding when I was unable to devote all my attention in their direction. I look forward to spending time with them and assisting them in achieving their dreams.

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I wish to thank Dr. Sue Bell and Dr. Jeffrey Smith for their endless support throughout the project milestones. It is hard to believe this journey is coming to a close.

Finally, I would like to thank the project design team at my project site. These individuals were an essential part of my success. They became change agents, helping their peers to understand the value of bedside report and adopt this change in practice openly.

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Section 1: Overview of the Evidence-Based Project

Introduction

This initial section provides a brief discussion, including background information, on challenges related to unit handoffs in which patient care is transferred from a nurse in the emergency department (ED) to a nurse on a medical–surgical (M/S) floor. The problem statement and significance of the issue to health care are discussed. The purpose of the Doctor of Nursing Practice (DNP) project is presented with several project questions. Key terms and abbreviations are defined for the reader. A description of the project, including limitations, concludes the section.

Statement of the Problem

The problem addressed by this DNP project is ineffective handoffs from ED nurses to M/S unit nurses. Although all handoffs between units could be chosen as research topics, transitions between the ED and M/S unit make up the majority of patient transitions within the organization that is the focus of this study. Therefore, this sample is a realistic representation of the larger population of inpatient units. By nature, patient care transitions between units are fraught with challenges that can result in delays, miscommunication, and decreased patient and provider satisfaction (Hilligoss & Cohen, 2013). Organizations are charged to design better handoff processes that reduce patient risk, enhance the overall patient experience, and increase patients' involvement in their care.

Problem Background

In 2006, *The Joint Commission* (TJC) National Patient Safety Goals challenged care providers to improve the effectiveness of communication during patient handoffs.

Despite this challenge, little emphasis has been placed on improving transitions between units (Hilligoss & Cohen, 2013). The Institute of Medicine's (IOM; 2000) landmark safety report, *To Err is Human: Building a Safer Health System*, identified EDs as areas of high error rates with serious consequences. This fact is not surprising, as the ED environment is home to several qualities identified by The National Quality Forum as high risk for patient error. These high-risk qualities include high patient volume, unpredictable patient flow, variable patient acuity, diverse treatment technologies, and barriers to communication with patients, families, and providers (Baker, 2010). Patient satisfaction depends on both the patient experience and the quality and safety of care provided. Over 29 million admission handoffs occur annually in the United States between the ED and inpatient staff. Each handoff is both a threat and an opportunity.

Since the implementation of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, which measures patient satisfaction, healthcare organizations have increased their focus on improving the patient experience. Today's healthcare consumer can compare hospital scorecards for patient outcomes, safety, and satisfaction via the Hospital Compare website. For hospital staff, partnering with patients in care decisions improves outcomes and increases the value of care, according to the IOM (2000). Handoffs are one opportunity to enhance the patient-provider partnership.

The American Nurses Credentialing Center (ANCC) noted that nurse satisfaction is linked to improved quality of care and better performance in nurse sensitive outcomes (American Nurses Credentialing Center, 2013). Boev (2012) argued that when nurses are satisfied, patients are likely also to be satisfied. Therefore, increasing staff satisfaction

through improving the handoff process has the potential to impact patient satisfaction and outcomes positively.

Purpose of the Study

The area of investigation for this DNP project was the impact of implementing bedside report during transitions from the ED to an inpatient nursing unit in an academic medical center. In this project, I sought to analyze the unique challenges of between-unit handoffs where patient care is transferred from a nurse in the ED to a nurse on a M/S unit because this is representative of the majority of admissions within the organization. The impact that a face-to-face reporting process has on patient progression and satisfaction was evaluated.

Project Questions

In this project, I sought to address the following questions:

1. Does implementing a standardized bedside handoff between the ED and an inpatient M/S unit using a standardized process improve patient and staff satisfaction?
2. What impact does implementing a bedside handoff between the ED and an inpatient M/S unit have on patient throughput?

Significance to Nursing and Healthcare

A standardized bedside report process to support handoff of patient care between the ED and inpatient M/S unit was designed and implemented. The practice change was evidence-based and reflected consideration of the distinct obstacles associated with handoffs between units. The standardized process was used to give a report on all patients being admitted to any unit within the organization. This standardized report

occurred by telephone for all units except patients admitted to the experimental M/S unit. For patients admitted to the M/S unit designated for study, a standardized reporting process occurred at the patient's bedside. This sample was chosen out of convenience and because 60% of all admissions from the ED are admitted to the selected M/S unit. Attempting to implement a bedside reporting process for all ED admissions would have been too great an undertaking for the scope of this project. However, there is potential for the bedside report process to be implemented on a larger scale. The results of this project add to the existing body of knowledge focused on improving handoffs, and the methodology can be replicated in similar healthcare settings. Ultimately, the findings can assist others seeking to improve care transitions and provide insight on how to improve communication, satisfaction, and efficiency in an era of reduced resources and increasing quality expectations from patients and funders.

Project Description

An evidence-based practice (EBP) approach was used to complete the project. Synthesis of the best available evidence found in the literature, practitioner expertise, and patient preference was employed to create a standardized bedside report process for transitioning patients from the ED to the inpatient M/S units. The goal was to improve communication and satisfaction, as well as to maintain or decrease current patient progression times. Lewin's change model served as a theoretical framework for project implementation.

In order to adequately compare pre and postimplementation data, it was important to understand the current state. The transition process from the ED to the M/S unit included a telephoned verbal report from the ED RN to the M/S RN. No structured

format was used for the handoff communication. After a telephoned handoff, the patient was transported from the ED to his or her assigned M/S unit bed by unlicensed assistive personnel (UAP). Once on the M/S unit, the UAP informed the unit secretary of the patient's arrival. Next, UAP from the M/S unit met the patient and began orienting him or her to the inpatient unit.

Navicare reports, the existing hospital data source, provided patient progression data. Navicare is patient flow technology that provides detailed information regarding the movement of patients throughout the inpatient care continuum. The technology can provide real-time patient census. A report listing all patient transfers from the ED to inpatient units is autogenerated daily. This report indicates, for each transfer, the exact time when a unit bed is ready, written orders are available, the RN to RN report is completed, and the patient arrives in his or her assigned inpatient bed. Patient progression data from M/S units adopting the bedside reporting process and M/S units using the telephoned reporting process were compared.

Kronos is the organization's time and attendance, scheduling, and labor tracking system. Staffing reports were pulled from the Kronos system to assist in explaining times of increased inefficiency or delay. Patient and nurse satisfaction with the handoff process was assessed using written surveys. Pre and postsurvey results were analyzed comparatively to establish the significance of the results.

Project Limitations

Because the DNP project is intended to address a real-life problem in a clinical setting, there is limited ability to control for extraneous influences. The project took place in a 520-bed, full-service, not-for-profit teaching hospital located in a large urban

area. The clinicians designed practice changes unique to the project site. Organizational culture and politics might have influenced these individuals. The findings might not be generalizable to all settings.

Glossary of Relevant Terms and Abbreviations

Agency for Healthcare Research and Quality (AHRQ): The health services research arm of the U.S. Department of Health and Human Services (HHS), specializing in major areas of health care research including, but not limited to quality, safety, care delivery, clinical practice, and technology (Centers for Medicare and Medicaid Services, 2012).

Bedside report: Communication of essential patient information from one care provider to another that occurs at the point of care delivery (Friesen, Herbst, Turner, Speroni, & Robinson, 2013).

Center for Medicare and Medicaid Services (CMS): A federal agency within the U.S. Department of Health and Human Services responsible for establishing and enforcing quality and accrediting standards, administering the Medicare program and partnering with state governments to administer Medicaid, the State Children's Health Insurance Program, and health insurance portability standards (CMS, 2010).

Evidence-based practice: The integration of the best available evidence, clinical expertise, and patient preference to inform practice (Sackett, Strauss, Richardson, Rosenberg, & Haynes, 2000)

Handover/Handoff: A process by which patient information involving a patient's condition and treatment plan are communicated from one RN to another (The Joint Commission, 2008).

The Joint Commission (TJC): A U.S.-based nonprofit tax-exempt organization that accredits and evaluates healthcare organizations and programs in the United States in an effort to promote the provision of safe, effective, quality care of the highest value (Joint Commission, n.d.).

Transition: The transfer of care from one provider to another, often involving a change in geographic location. For the purpose of this project, it implies a transfer from the ED to the inpatient M/S unit (Beach et al., 2012).

Summary

This section provided an overview of the DNP project investigating the impact of bedside report to transition patients from the ED to the inpatient unit. The study's problem, background, purpose, and implications for nursing and healthcare were described. A broad overview of the project, specific project questions, and limitations were discussed. The section concluded with a glossary of terms used within the DNP project. Section 2 provides a review of the scholarly evidence used to support the project work.

Section 2: Review of Scholarly Evidence

Introduction

The reason for completing the literature review was to identify the empirical evidence examining outcomes related to patient handoff practices between nursing care providers. An emphasis was placed on answering the following question: What evidence exists evaluating the impact of implementing a standardized bedside handoff between the ED and an inpatient M/S unit on patient and staff satisfaction and patient progression? This section contains definitions of search terms and descriptions of methods used to select articles for review. The results of the search are explained, and a comprehensive synthesis of the evidence is included.

Definition of Search Terms

Bedside Report

According to Friesen et al. (2013), *bedside report* occurs at the point of care and consists of communication about a patient's condition, assessment, and plan of care, as well as a general survey of the environment to evaluate safety. Much of what is found in the literature describes bedside report as a mechanism for nurse-to-nurse report at shift changes within closed units. Traditionally, report most often occurs in a written or oral format at a place removed from the clinical setting and without the patient's knowledge or input (Kerr, Sai Lu, & McKinlay, 2013).

Handover and Handoff

The terms *handover* and *handoff* are often interchanged in the literature and are considered identical terms for the purpose of this paper. TJC (2008) indicated that the handoff process is integral to patient care and clinician practice and defined the term as

“a process in which information about patient/client/resident care is communicated in a consistent manner from one care provider to another” (para. 4). It is during this transfer of information that patients are increasingly vulnerable. Nurses do not receive formal training in handoff communication but may be held legally responsible for the information exchanged during the handover process (Riesenberg, 2010). Much variability exists, despite pleas by both The World Health Organization (2007) and TJC (2008) to add standardization .

Transition

A *transition* is a movement from one dynamic setting of the care continuum to another. It often involves the communication of essential patient information between care providers and includes a geographic component (Beach et al., 2012). TJC (2012) defined a transition as the movement of a patient from one provider or care setting to another based on the required care or current medical condition. For the purpose of this paper, *transition* indicates the physical movement of a patient from the ED to an inpatient unit. It includes the transfer of care from a nurse in the unit of origin to the care of a nurse in the unit of destination.

Literature Search Methods

Search Strategy

The following databases were searched to identify articles published in English between January 2004 and March 2014: Academic Search Complete, CINAHL, Cochrane Database of Systemic Reviews, Google Scholar, Health and Medical Complete, Joanna Brigg’s Institute for Evidence Based Resources, MEDLINE, Nursing and Allied Health Source, Ovid, Science Citation Index, and Thoreau. The terms *bedside*,

emergency department, patient, nursing, AND report, handoff, handover, and transitions were used to guide the search. Both quantitative and qualitative studies were included. The John Hopkins EBP model was used to evaluate the quality of evidence found. In this model, the evidence is ranked in level from 1 to 5, with 1 being the strongest level of evidence and 5 being the weakest. Each article is also given a quality rating of A = High, B = Good, or C = Low according to the John Hopkins's standards for scientific evidence, summative reviews, and expert opinion (Newhouse, Dearholt, Po, Pugh, & White, 2007).

Search Results

The search resulted in a total of 2,532 articles with full text. Specific search results are available in Table 1. Once duplicates and unrelated articles were removed, 48 articles remained. All 48 articles were reviewed. The results revealed underdeveloped research regarding handoffs between nursing units. Only three articles (McFetridge, Gillespie, Goode, & Melby, 2007; Pesanka et al., 2009; Shendell-Falik, Feinson, & Mohr, 2007) specifically addressed the research question and examined the impact of implementing bedside report across units. Article inclusion for the review was expanded to incorporate studies examining the impact of implementing bedside report within a closed nursing unit. The search identified five articles using the Lewin change model as a driver for development and implementation of the bedside report process. Because Lewin's model provided a conceptual framework for the DNP project, these articles helped to inform project design and implementation. Articles addressing Lewin's model were excluded, along with 11 additional articles, from the final analysis because they failed to report outcome metrics. Three articles were removed because they provided case study analysis of communication not related to a bedside handoff. Handoffs

between physicians were the focus of nine excluded articles. The remaining 17 articles were included in the final review listed in Appendix A. It is important to note that one published protocol outlining the proposed methodology for a systemic review was identified in the Cochrane Database of Systemic Reviews (Smeulers, 2012). However, this systemic review, exploring the effectiveness of varying types of nursing handoffs, was not completed as of the date of the DNP project completion.

Table 1

Unique Database Search Results

Database	# of results
Academic Search Complete	21
CINAHL	823
Cochrane Database of Systemic Reviews	1
Google Scholar	143
Health and Medical Complete	20
Joanna Brigg's Institute for Evidence Based Resources	234
MEDLINE	623
Nursing and Allied Health Source	411
Ovid	21
Science Citation Index	50
Thoreau	185
Total	2,532

Findings

Patient Satisfaction

Recently, many organizations have placed an emphasis on improving the patient experience. Much of the urgency around this focus has come as a result of value-based purchasing and the realization of publically reported HCAHPS scores. Bedside report has been linked to increased patient satisfaction (Anderson & Mangino, 2006; Sherman,

Sand-Jecklin, & Johnson, 2013) and improved HCAHPS scores (Pesanka et al., 2009; Shendell-Falik et al., 2007). The reviewed studies measured the increase in patient satisfaction through varied methods including home-grown surveys, interviews, focus groups, and measurements of nurses' perceptions. Two studies noted no change in patient satisfaction related to bedside report (Cairns, Dudjak, Hoffman, & Lorenz, 2013; Jeffs et al., 2014). Every study noting improvement in patient satisfaction as a result of bedside report, with the exception of Pesanka et al. (2009), explored handovers at change of shift within a single nursing department. Pesanka studied handoffs between nursing care providers and transport personnel. While the DNP project does not focus on in-unit handoffs, the evidence in the literature was strong enough to hypothesize an increase in patient satisfaction as a result of bedside report implementation during handoffs between departments.

Patient Involvement

Many studies have examined patient involvement as an outcome of bedside report. This was either measured as reported by the patient (Friesen et al., 2013; Jeffs et al., 2014; Sand-Jecklin & Sherman, 2013) or as a perception of the nursing staff (Evans et al., 2012; Laws & Amato, 2010). According to Jeffs et al. (2014) and Sherman et al. (2013), bedside report allowed patients to feel more informed and provided an opportunity for them to bond with caregivers, ask questions, and gain trust in the care provider team. When implementing bedside report, it might be beneficial to discuss anxiety-producing or painful elements outside of the patient's earshot. Because nurses normally give report to one another while standing up, conscious effort needs to be made to avoid talking over the patient and to instead incorporate him or her into the dialogue.

Nurse Satisfaction

Improvement in nursing satisfaction has been shown to lead to improved quality of care and patient satisfaction (Newman & Maylor, 2002). Evans et al. (2012) found bedside report to improve nursing satisfaction by increasing nurses' ability to prioritize work and see patients earlier in their shift. Improved teamwork between staff members accounted for the increased nursing satisfaction reported by Sherman et al. (2013). Similarly, at this study site, the ability for nurses on the M/S floor to engage in face-to-face communication with the ED nurse during report had the potential to foster teamwork and build relationships between staff in the two departments.

Quality of Report

Improved quality of report was found in seven studies (Cairns et al., 2013; Farhan, Brown, Vincent, & Woloshynowych, 2012; McFetridge, Gillespie, Goode, & Melby, 2007; Riesenber, 2010; Sand-Jecklin & Sherman, 2013; Sherman et al., 2013). It is unclear whether this improvement was related to standardizing the reporting process or moving the report to the bedside. Sand-Jecklin and Sherman (2013) incorporated bedside report without creating a standard report template. The results demonstrated less nurse-perceived improvement in report quality than studies where both standardization and bedside report were adopted. According to Cairns et al. (2013) and Farhan et al. (2012), more pertinent patient information was shared efficiently when clinicians used a standard report template. Standardization allowed the reporting process to focus on relevant patient information rather than social dialogue or non-work-related topics. Based on these findings, it appears that implementing both bedside report and a standard template would offer the best outcomes.

Patient Safety

Two-thirds of all sentinel events can be linked to poor communication (TJC, 2013). Bedside report using a standard report tool has resulted in decreased patient safety events by lessening the frequency of omitting or incorrectly reporting significant patient information (Foster & Manser, 2012; McFetridge, Gillespie, Goode, & Melby, 2007). Other studies noted improvement in nursing documentation of safety items (Kerr et al., 2013; Maxson, Derby, Wroblewski, & Foss, 2012) and completion of tasks in a timely manner (Shendell-Falik et al., 2007) after bedside report was employed. Laws and Amato (2010) identified an overall nurse-perceived improvement in patient safety. One study by Kerr et al. (2013) reported improvement in nurse sensitive indicators after implementing bedside report. The same year, Sand-Jecklin and Sherman (2013) published information contradicting this finding. Although the impact that bedside report has on nurse sensitive indicators is unclear, the intervention does appear to have positive safety implications.

Patient Progression

As very few studies have implemented bedside report for patient transitions between units, there is no evidence informing its impact on patient progression. The closest relevant information evaluates the impact of bedside report on nursing overtime, patient length of stay, and nursing report time. Anderson and Mangino (2006), Cairns et al. (2013), and Evans et al. (2012) all noted a decrease in overtime when bedside report was implemented, while Laws and Amato (2010) witnessed an increased report length. Sherman et al. (2013) found a decreased length of stay for patients in a unit where staff implemented bedside report. However, the sample size was small, and it is unclear

whether the findings were coincidental or a direct result of bedside report. Assessing transfer times from the ED to the M/S unit would add a new dimension to the evidence available regarding the impact of bedside report on outcomes.

Lewin's Change Model

Because Lewin's change model of unfreezing, moving, and refreezing is the framework for the DNP project implementation, it is important to note several authors who used this model successfully to enculturate bedside report within nursing units (Caruso, 2007; Chaboyer et al., 2009; Grant & Colello, 2009; Hagman, Oman, Kleiner, Johnson, & Nordhagen, 2013; Olson-Sitki, Glisson, & Weitzel, 2013). While none of the articles examined outcomes impacted by bedside report, they do offer insight into successful implementation. *Unfreezing* typically involved highlighting current dissatisfaction around the reporting process and communicating the benefits of bedside report found in the literature. The *moving* stage required the communication of clear expectations (Hagman et al., 2013) and staff involvement in the process design (Caruso, 2007; Chaboyer et al., 2009; Olson-Sitki et al., 2013). Grant and Colello (2009) and Hagman et al. (2013) stated that persistent reinforcement of the process was necessary to avoid reverting back to older habits. Leadership support was essential in all stages of the change process.

Summary

Robust evidence concerning the use of bedside report during patient handoffs between nursing departments is scarce in the literature. The information that does exist is mostly anecdotal or qualitative in nature. Despite these facts, the risks associated with implementing bedside report are low. Literature indicates bedside report within nursing

units to have positive consequences for patient safety, satisfaction, and involvement. The process has also improved nurse satisfaction and report quality. These reported benefits provide a case for similar results when implementing bedside report as part of the handoff process across units. Lewin's change model is an appropriate theoretical framework to support this work. This section has defined search terms and the methods used to determine article selection within the review. The results of the literature review, with a comprehensive synthesis of the evidence, have been included. The next section provides the methodology for the DNP project based on this synthesis.

Section 3: Approach

Introduction

DNP-prepared nurses are required to evaluate and synthesize the best available evidence, designing new practice approaches that improve outcomes for patients (American Association of Colleges of Nursing [AACN], 2006). The purpose of this study was to improve the handoff process occurring when a patient transitions from the ED to the inpatient M/S unit. This section describes the methodology of the study, including design, population and sampling, data collection and analysis, and project evaluation.

Project Design

The DNP project followed a quasi-experimental design consisting of pre and postimplementation data measurement. The control group continued to give telephoned report to transition patients from the ED to M/S unit. An experimental group transitioned patients from the ED to the M/S unit using a bedside report. Both groups used the same standardized reporting framework. The primary independent variable was the bedside handoff process. Dependent variables included patient and nurse satisfaction and patient throughput. A group of clinicians from the ED and the M/S unit designed the handover process using an EBP approach. Involving stakeholders early in the process made the change easier to accept and fostered success. In order to achieve unfreezing, the first stage of Lewin's change model, clinicians needed to recognize problems with the current handoff process. Recognizing issues with current practice and identifying a potentially improved process allowed design team members to progress to the next step in the model, moving. Here, clinicians began to use the new handover process and eventually adopt it

as standard practice. When the process became standard practice, refreezing occurred, and the change was accepted. I was interested in knowing whether nurses and patients were satisfied with the bedside handoff process and whether the information communicated by the ED nurse to the M/S nurse adequately prepared the clinician to care for the patient.

Preimplementation and postimplementation data were collected through several means. The HCAHPS survey was used to measure patient satisfaction, and The Medical Intensive Care Unit (MICU) Report Communication Scale (James et al., 2013), after slight modification, was used to measure nurse satisfaction with the handoff process. Navicare, which is an informatics tool used within the organization to track patient throughput, provided information on patient progression. Kronos is the organization's time and attendance, scheduling, and labor tracking system. Staffing reports pulled from this electronic scheduling system were used to explain throughput outliers such as times of unusual delay or efficiency.

Designing the Bedside-Reporting Process

A representative group of staff from the ED and inpatient M/S units was selected to help design the standardized report process and workflow for the bedside handoff. Four direct care nurses selected from each unit (two from the night shift and two from the day shift), a charge nurse from each area, and the unit nurse managers comprised the project design team. To gain an appreciation for each other's workload, nurses from the design group spent time shadowing in the ED and M/S areas. This experience aided in both the unfreezing and moving phases of the project. As a result of insights gained during the shadowing experience, nurses in the ED felt that they were better equipped to

transport the patient to the inpatient unit. The M/S nurses concurred and, as a tradeoff, agreed to obtain the telemetry monitor, when ordered. This task had previously been the responsibility of the ED staff. After a series of four meetings, the group had developed a workflow process for bedside handoff between the two units. This process map is displayed in Figure 1.

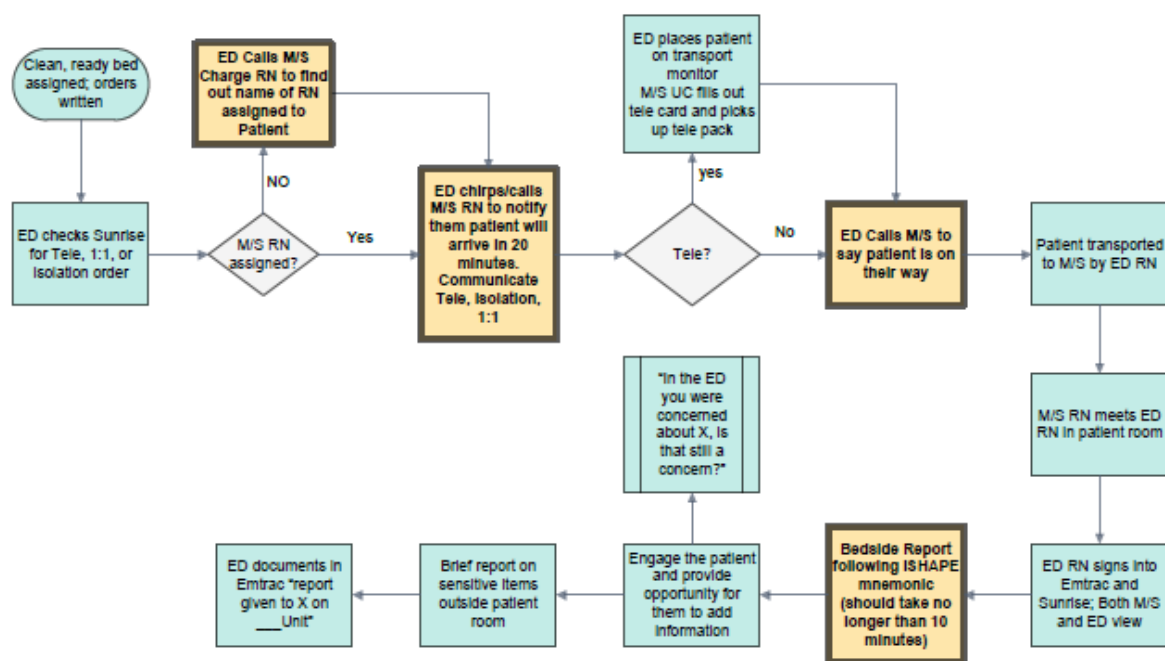


Figure 1. Process map: Bedside transition between units.

After review of several reporting frameworks found in the literature (Cairns et al., 2013; Coonan, 2013; Pesanka et al., 2009; Shendell-Falik et al., 2007), the group chose to adopt Friesen, Herbst, Turner, Speroni, and Robinson's (2013) ISHAPED (I = Introduce, S = Story, H = History, A = Assessment, P = Plan, E = Error Prevention, and D = Dialogue) report structure for all handoffs within the organization. Adopting one reporting framework allowed a comparison of patient progression times in the control

group and experimental group to identify the impact of bedside handoff on this variable. Members of the design team educated peers in the ED and M/S unit on the new reporting framework and bedside report workflow process. Education began prior to implementation and was ongoing during the implementation and data collection period. Daily huddles on both units served as a venue for reviewing the new handover process. Ongoing feedback was obtained from design members and the ED and M/S unit managers on the new workflow. Concerns were resolved in real time.

Population and Sampling

The population for the study included all RNs working in the ED and all RNs working on the M/S floor. It also included all patients admitted through the ED to the M/S units involved in the study. This sample was chosen out of convenience and because 60% of all admissions from the ED are admitted to the selected M/S units. Attempting to implement a bedside-reporting process for all ED admissions was too great an undertaking for the scope of this project. The project took place in a 520-bed, full-service, not-for-profit teaching hospital located in a large urban area. In an average month, 150 patients are admitted from the ED to the M/S unit. All RNs employed in the ED or M/S units were asked to participate voluntarily. Each had the option to decline without consequence. The goal, in order to ensure adequate sample size for analysis, was to include 80% of the nursing staff in each department and 200 patient transitions (Houser, 2008). This goal was met.

Data Collection

Preimplementation patient progression data from Navicare were collected retrospectively for 356 patient transitions from the ED to selected M/S units.

Postimplementation data collection began 1 month after the standardized bedside report process was initiated. The data collection period continued post implementation until the targeted response rate of 350 patient transitions from the ED to M/S units was achieved.

Surveys were used to collect data revealing nurse satisfaction with the handoff process and patient satisfaction. The survey for RNs was administered through Survey Monkey at two separate times during the DNP project, 1 week prior to and 1 month after implementation of the bedside-reporting process. In an effort to increase the participation rate, RNs on the handoff design team reminded peers daily during safety huddles that the survey was open and available for participation. Patients randomly receive the HCAHPS survey by mail and email after discharge. The survey is administered by Press Ganey, and no consent is required. The current survey administration process was not altered. HCAHPS results were collected for 2 months pre and postimplementation of the bedside handover.

Instruments

Reports from Kronos and Navicare were the instruments used to collect data on patient progression and staffing. Two survey tools were used to collect data on patient and staff satisfaction. *Reliability* refers to the ability of a test to yield the same results every time it is administered (Polit & Beck, 2008). *Validity* refers to the ability of the survey to measure what it is intended to measure. The HCAHPS survey is administered to patients upon discharge from the M/S units. It is a national survey with regularly reported results that can be filtered by nursing unit and time frame. The HCAHPS survey was developed by the *Center for Medicare and Medicaid Services (CMS)* in partnership with the *Agency for Healthcare Research and Quality (AHRQ)*. The survey has

undergone extensive psychomotor analysis and consumer testing and is deemed both reliable and valid, yielding a Cronbach's alpha of 0.8 (Centers for Medicare and Medicaid Services, 2013).

A second survey was used to measure nurse satisfaction with the handoff process between the ED and M/S floor. The Medical Intensive Care Unit (MICU) Report Communication Scale was used by James et al. (2013) to assess nurse satisfaction with handoffs during change of shift in the MICU. Permission was granted from Jukkala (personal communication, March 11, 2014) to use and modify this survey to assess nurse satisfaction with the report between the ED and inpatient unit. The modified survey is attached as Appendix C. The nine-question survey offers four Likert-scale responses ranging from *strongly agree* to *strongly disagree*. James et al. (2013) calculated the Cronbach's alpha to be 0.66 for their satisfaction with care survey. The survey was renamed the Transfer Report Communication Survey. The word *MICU* in the original survey was replaced with the words *sending/receiving unit* in the revised survey. Although minor revisions in the wording of the survey questions occurred, reliability of the survey was maintained. The survey by James et al. was reviewed by content experts to establish face and content validity. The expert's review revealed that the questions appear to measure what they are intended to measure and that the questions reflect the area of investigation, satisfaction with the handoff process.

Protection of Human Rights

Survey participation was voluntary, and no personal healthcare information or personal identifiers were collected. Because I am known as an employee of the organization by staffs in the ED and M/S units, Survey Monkey was used to protect the

participant's welfare. Using Survey Monkey to administer and collect survey results allowed individuals' participation or decision not to participate to be completely anonymous. RNs from the ED and M/S units were presented with an information sheet inviting them to participate in the study. This information sheet is found in Appendix B. The informational sheet informed the RNs that responding to the survey was voluntary and implied consent to participate in research. In order to protect study participants, the project was submitted to Walden's Internal Review Board (IRB) and the organizational IRB for approval prior to implementation (approval # 09-03-14-0169383 and # 819953). A waiver of consent was granted as the research involved no more than minimal risk to the subjects, handoffs were current practice from the ED to the M/S unit, the goal was process improvement, the waiver of alteration did not adversely affect the rights and welfare of the subjects, and patients and staff had the option of not completing the survey without repercussions. The research could be carried out practicably without the waiver of alteration and consent but may have biased the results or potentially slowed down the transition process. The handoff process was developed independently of the evaluation and was based on the best available evidence in the literature. At no point within the project was the process change noted to have a negative impact on outcomes. Had this occurred, the new handoff process would have been suspended and the previous handoff process reimplemented.

Process

Survey Monkey was used to administer the staff satisfaction surveys pre and postimplementation of the redesigned handoff process. Survey Monkey remained open until 80% of staff responded. Patients were randomly selected to receive the HCAHPS

survey by Press Ganey, the organization's survey administrator. Results were obtained through the Press Ganey database and sorted to represent only the units within the study sample. HCAHPS results were collected by patient discharge date from 1 month prior to 1 month after implementation of the bedside-reporting process. The majority of patients are admitted to the inpatient M/S units included in the study. Therefore, the assumption is that the HCAHPS results were representative of those patients experiencing the new handoff process. This could potentially be a limitation of the study. No patient identifiers were collected or used in the project. All data collected were stored in paper form in a locked cabinet and electronically on password-protected storage devices. Only I had access to the required password and a key to the locked cabinet. The data will be maintained for 5 years and then shredded or permanently deleted from electronic storage.

Data Analysis

Survey responses were downloaded into the Statistical Package for Social Sciences (SPSS) 20 software for analysis. A dependent-sample *t* test was used to evaluate whether there was a statistically significant difference in patient and nurse satisfaction mean scores before and after the implementation of bedside report. A comparison of pre and postintervention data regarding patient progression times was completed using this same method of analysis. Differences between the mean patient progression times and patient satisfaction scores in the control and experimental groups were evaluated using an independent-sample *t* test.

Project Evaluation

The results of the data analysis were used to determine whether the handoff process should be upheld, abandoned, or altered. Because the results demonstrate a

positive impact on patient progression and patient safety, the handoff process will be adopted on a larger scale within the organization. More data collection is warranted to evaluate the impact of the newly designed report process on patient satisfaction. Had the findings demonstrated a negative impact on satisfaction or patient progression, the process would have been abandoned until a deeper understanding of the results and a revised plan for redesign were established.

Summary

Patient handoffs are met with unique communication challenges. Focused effort on enhancing and improving these processes has the potential to increase patient and staff satisfaction and impact patient progression. This section has presented the methodology, sample selection, and data analysis methodology used for the DNP project examining the impact of a face-to-face structured report process.

Section 4: Findings and Discussion

Introduction

The DNP project sought to examine the impact of implementing bedside report to transition patients from the ED to a M/S unit. The goal was to answer the following questions:

1. Does implementing a standardized bedside handoff between the ED and an inpatient M/S unit using a standardized process improve patient and staff satisfaction?
2. What impact does implementing a bedside handoff between the ED and an inpatient M/S unit have on patient throughput?

The HCAHPS survey assessed patient satisfaction with the new handoff process through the evaluation of responses to three specific questions within the nursing domain. The Transfer of Care Survey evaluated the effectiveness of the communication between the ED and M/S units, the perceived quality of the information exchanged, and the overall safety of the handoff. A significant improvement in the transfer of information between the two departments was noted, potentially increasing safety for patients and satisfaction for RNs (Ishmael & Manley, 2011). Post project implementation data analysis of patient progression information noted a considerable reduction in the amount of time between when a patient in the ED was ready for transfer to M/S and the actual arrival time to the M/S unit.

Context of Findings

There is limited information in the current literature on the impact of implementing a bedside report process to transition patients between departments. Much

of the evidence concerns only handoffs within closed patient care units. The existing evidence has demonstrated that, in closed units, bedside report using a standard report tool decreases patient safety events (Foster & Manser, 2012; McFetridge, Gillespie, Goode, & Melby, 2007) and increases patient and staff satisfaction (Sherman et al., 2013). This project was the first to investigate how implementing a bedside report process to transition patients *between* departments impacts patient and nurse satisfaction, as well as patient progression.

Patient Satisfaction Findings

Patient satisfaction was assessed using the HCAHPS survey, specifically three questions before and after implementation of the bedside report handoff process. Surveys were administered by Press Ganey and sent to randomly-selected discharged patients from each of the M/S units. In the 2-month period prior to implementation of the bedside transition process, 43 patients from the M/S unit returned surveys. Post implementation, 44 surveys were returned over a 2-month period. Press Ganey reported top box percentages for each question on the survey. The top box score indicates the percentage of respondents who chose the top score of *always*. The top box responses to the following three questions were analyzed using SPSS software:

1. During this hospital stay, how often did nurses treat you with courtesy and respect?
2. During this hospital stay, how often did nurses listen carefully to you?
3. During this hospital stay, how often did nurses explain things in a way you could understand?

Dependent-samples *t* test revealed no improvement in responses to the three questions. Patients did not feel that nurses treated them with more courtesy and respect after implementation of the bedside report process ($M = 80.93, SD = 1.27$) than prior to implementation ($M = 73.24, SD = 2.54$), $t(1) = 8.56, p = 0.07$. The same was true of patients' rating of nurses' ability to listen carefully post- ($M = 85.12, SD = 8.77$) and preimplementation ($M = 84.91, SD = 7.99$), $t(1) = 0.021, p = 0.99$ and the frequency of nurses explaining things in a way patients could understand post- ($M = 74.10, SD = 5.86$) and preimplementation ($M = 70.30, SD = 5.09$), $t(1) = 7.00, p = 0.56$. Overall, no significant improvement in patient satisfaction was reported by patients. The questions on the HCAHPS survey assessed overall patient satisfaction and lacked the specificity to assess patient satisfaction with the transition process independently of all other hospital experiences. This limitation most likely influenced the results of the data analysis. According to Radtke (2013), patient satisfaction is measured as the summation of everything a patient experiences during his or her hospital stay. Therefore, establishing a causal relationship between one process change and an improvement in satisfaction is challenging.

Findings: Nurse Satisfaction, Quality of Report, and Implications for Safety

Nurse satisfaction, report quality, and safety related to communication were all hypothesized to improve as a result of implementing a bedside report process to transition patients from the ED to the M/S unit. The Transfer Report Communication Survey was used to assess all three aspects pre and post implementation of the new transition process. The survey was divided into three sections. The first section consisted of four questions targeted at measuring the ease of communication between the ED and inpatient nursing

unit. The middle two questions were used to gather information about the report quality, and the final three questions concerned the degree to which the report provided the information needed to care adequately for the patient.

The Transfer Report Communication Survey was administered via Survey Monkey 1 month prior to implementation of the bedside handoff process and 1 month after implementation. There were 37 RNs in the ED and 39 RNs in the M/S unit eligible to take the survey. Seventy-eight percent of ED nurses responded to the preimplementation survey, and 84% responded to the postimplementation survey. The M/S units had similar RN response rates, with 85% responding to the preimplementation survey and 80% responding to the postimplementation survey. The responses were normally distributed and demonstrated a power level of 0.26 to 0.84 with a significance of 0.05. The majority of nurses on both units were Bachelor of Science in Nursing (BSN) prepared and had 7 years of nursing experience. Most RNs were female and worked full time, defined as greater than 32 hours per week. Specific demographics are provided in Table 2.

Table 2

ED and M/S RN Demographics

Demographic	ED		M/S	
	Frequency	Percent	Frequency	Percent
Education				
Associate's degree	5	13.51	10	25.64
Bachelor's degree	28	75.68	28	71.79
Master's degree	6	16.22	1	2.56
Years experience as RN				
Minimum	1	2.70	1	2.56
Maximum	32	86.49	27	69.23
Mean	10.44	28.22	9.71	24.90
Mode	7	18.92	7	17.95
Sex				
Male	12	32.43	3	7.69
Female	25	67.57	36	92.31
Nationally certified	11	29.73	31	79.49

The mean score for all survey questions ranged from 1.71 to 2.78 (*SD* ranged from 0.46-0.86) on the preimplementation survey and from 1.52 to 2.74 on the postimplementation survey (*SD* ranged from 0.51-0.84) on a scale of 1 = *strongly agree* to 4 = *strongly disagree*. Initially, only half of the nurses strongly agreed or agreed that it was easy to talk to nurses from the other units and 44% strongly agreed or agreed that perceived communication was open, compared to 70% and 56% post implementation of the bedside report process. Analysis of the mean responses via dependent-sample *t* tests (Table 3) noted statistically significant improvement, at the 0.05 significance level, in preimplementation survey and postimplementation survey scores for perceived openness and ease of communication, but not for enjoyment or ease of asking for advice. The results suggest an increase in teamwork and ability to work together across the two departments as a result of the new reporting process.

Table 3

Descriptive and t Test Statistics Analysis of Communication Openness

Outcome	Pretest		Posttest		n	95% CI for mean difference		t	df	p
	M	SD	M	SD						
Enjoy talking to RN from sending/receiving unit	2.39	0.86	2.33	0.81	61	-0.48	0.18	1.15	60	0.251
It is easy to ask advice	2.49	0.87	2.44	0.79	61	-0.60	0.16	0.90	60	0.370
It is easy to talk openly	2.46	0.87	2.28	0.84	61	0.06	0.30	3.02	60	0.004
Communication is open	2.62	0.86	2.46	0.83	61	0.07	0.26	3.43	60	0.001

The assessed quality of the report between the ED and the M/S unit specifically concerned the accuracy of the information exchanged and the ability to understand the reported patient information during the handoff process. Both qualities were significantly improved after implementation of the bedside report process. The statistical analysis via dependent *t* test is reported in Table 4. After the bedside report process was implemented, a greater number of RNs felt that the information exchanged during report was more accurate and better understood by the nurse receiving the handoff information.

Table 4

Descriptive and t Test Statistics Analysis of Report Quality

Outcome	Pretest		Posttest		n	95% CI for mean difference		t	df	p
	M	SD	M	SD						
Information exchanged is not accurate	2.39	0.83	2.49	0.79	61	-0.18	-0.02	-2.56	60	0.013
RNs don't understand received information	2.3	0.74	2.51	0.79	61	-0.33	-0.10	-3.69	60	0.000

The final portion of the survey measured the receiving RN's perception of the handoff received, specifically considering how the report prepared the nurse to care for the patient. This section of the survey also measured the ED RN's perception of how well the report he or she provided to the M/S RN prepared him or her to care for the patient. ED RNs felt that they were able to provide information in a way that better prepared the M/S nurse to care for the patient after the bedside-reporting process was implemented. Interestingly, the M/S RNs perceived no significant improvement between the telephone and face-to-face reporting process's impact on the nurse's preparation to care for the patient. RNs on the M/S unit did report a decrease in the number of times they needed to check the accuracy of the information received during the handoff, potentially allowing more time to care for the patient. Inferential and descriptive statistical analyses are presented in Table 5.

Table 5

Descriptive and t Test Statistics Analysis of Report Accuracy

Outcome	Pretest		Posttest		n	95% CI for mean difference		t	df	p
	M	SD	M	SD						
Received report prepares me adequately	2.45	0.68	2.42	0.76	31	-0.12	0.18	0.44	30	0.662
I often need to validate the information	1.61	0.67	1.81	0.79	31	-0.34	-0.05	-2.68	30	0.012
The report given adequately prepares the RN	1.71	0.47	1.52	0.51	27	0.03	0.34	2.43	26	0.022
I often need to recheck the information given	2.78	0.70	2.74	0.59	27	-0.17	0.24	0.37	26	0.713

The results of the Transfer Communication Survey suggest an improvement in nurse satisfaction with the reporting process as a result of increased open communication, quality of report, and clarity of information provided. The Joint Commission (2013) noted communication as the number-one reason for sentinel events within healthcare organizations. Improving communication leads to a safer environment with reduced errors and increased real-time peer-to-peer review (Pfeiffer, Wickline, Deetz, & Berry, 2012).

Patient Progression Findings

There are no published studies examining the impact of a bedside-reporting process on patient progression. The closest relevant information evaluates the impact of bedside report on nursing overtime, patient length of stay, and nursing report time (Anderson & Mangino, 2006; Cairns et al., 2013; Evans et al., 2012). This project is the first to examine the impact of a bedside-reporting process on patient progression.

Navicare, an informatics tool used within the organization to track patient throughput, provided patient progression information for the M/S unit under study and the M/S unit used as the control group for the project. A total of 706 patient transitions, occurring over a 4-month period, were included in the data analysis for this project. Three hundred and fifty-six transitions occurred during the 2 months prior to project implementation, and 350 transitions occurred postimplementation. Daily Navicare reports provided time stamps for when a clean and ready bed was assigned to the patient in the ED, when the admission orders were written, when the nursing handoff occurred, and when the patient arrived in the inpatient unit. Fourteen percent (100/706) of the transitions were audited through a manual process in order to validate the accuracy of the

report data. Only four discrepancies were found between the canned report and the manual auditing, noting a difference ranging from 2 to 8 minutes between the actual and reported time the admission orders were written. Because this discrepancy was not significant, the report data were considered accurate for use in the data analysis.

Descriptive statistics were used to evaluate the mean, median, mode, minimum, and maximum patient transfer times from the ED to the inpatient M/S units. The results are presented in Table 6. For the purpose of this project, the transfer time was defined as the time when a clean and ready bed was assigned and admission orders were written until the time the patient arrived in the assigned inpatient unit bed and the hand-off process was completed. Transition times were collected over a 2-month period pre and postimplementation of the bedside-reporting process for both the experimental and control units. Pre and postimplementation mean transfer times were comparatively evaluated using inferential statistics.

Table 6

Transfer Time (Minutes)

Unit	Mean	Median	Mode	Min	Max	SD
Control unit pre	92	86	31	1	363	58
Control unit post	96	84	46	14	391	56
Experimental unit pre	94	84	79	2	356	52
Experimental unit post	80	73	62	3	246	46
All transfers in sample pre	93	85	79	1	363	56
All transfers in sample post	88	78	55	3	391	52

An independent-samples t test was used to compare transfer times in conditions with and without use of a bedside report process. Plotting of the data in a histogram

demonstrated normal distribution. Homogeneity of variances was demonstrated for all comparative data using Levine's test for equality of variances ($p > 0.05$). There was no difference between the mean transfer times in the control group during the 2 months prior to project implementation ($M = 92.21$, $SD = 56.45$) and the 2 months post implementation ($M = 95.63$, $SD = 58.24$); $t(373) = 0.58$, $p = 0.57$. This is an expected finding as the handoff process, consisting of a standardized ISHAPED telephoned report between the ED and inpatient M/S unit, remained unchanged throughout the duration of the project. There was a significant difference between the mean transfer times in the experimental group during the 2 months prior to the implementation of the bedside report process ($M = 94.43$, $SD = 52.31$) and the 2 months post implementation ($M = 79.63$, $SD = 46.23$); $t(329) = -2.73$, $p = 0.007$. These results suggest that implementing a bedside report process to transition patients from the ED to the inpatient unit has a positive impact on patient progression by significantly reducing patient transfer times.

Two additional steps were taken to assess the credibility of the results. An independent-sample t test was completed to compare the mean transfer times in the control and experimental unit pre and postimplementation. No difference was noted between the experimental unit and the control unit mean transfer times prior to implementation of the bedside report process ($t(346) = -2.48$, $p = 0.81$). However, a significant difference in mean transfer times between the two units was noted postimplementation of the bedside handoff process ($t(348) = 2.89$, $p = 0.004$). These results suggest that implementing a bedside report process reduces transfer times from the ED to the inpatient unit and the improved patient progression times did not occur in response to other confounders within the organization (Burns & Grove, 2009).

Staffing reports were pulled from Kronos, the organization's time and attendance, scheduling, and labor tracking system. These reports were used to calculate nursing productivity on the control and experimental unit over the course of the project. Productivity was calculated by dividing actual direct care hours per patient day (DCHPPD) by budgeted DCHPPD and multiplying by 100. Productivity for the control and experimental units remained between 95% and 105% over the course of the project. Lower productivity was noted in the control group, indicating better staffing in this unit. Table 7 provides unit productivity by month for the study duration.

Table 7

Monthly Nursing Productivity (%)

Unit	July	August	September	October
ED	122	109	106	108
M/S Control	95	99	96	96
M/S Experimental	101	105	100	101

Lewin's Change Model

Lewin's change model provided the theoretical framework for the DNP project. This model consists of three phases: unfreezing, moving, and refreezing. I presented baseline patient satisfaction and patient progression data to the project design team to initiate unfreezing. Both patient satisfaction scores and patient progression times had room for improvement. The staff inquired about evidence-based practices that could be applied in an effort to improve patient satisfaction and progression within the organization. The extensive literature review provided an evidence-laden portal to new ideas. Because bedside report was already well-established within the inpatient nursing

units for shift-to-shift report, expanding this practice across units seemed like a logical next step. The project team members were open to adopting a new transition process and were excited by the opportunity to design the new workflow. The practice of nurses shadowing one another in the ED and M/S units allowed individuals to *walk in each other's shoes* and experience firsthand the challenges faced by nurses in both departments. Including staff in the project development and gaining nurse manager support, strategies proven effective by Hagman, Oman, Kleiner, Johnson, and Nordhagen (2013) and McMurray, Chaboyer, Wallis, and Fetherston (2010), made the moving stage easier.

The moving stage required a well-designed communication and education plan with continuous reinforcement of the process. The design team members became project champions and actively monitored compliance with the bedside-reporting process. Peer-to-peer accountability helped to enculturate the practice change and prevented staff from drifting back to previously used patient transition methods. Refreezing, according to Olson-Sitki, Glisson, and Weitzel (2013), is the most challenging stage of change management, but is essential if long-term gains are desired. Refreezing was successful because the design team members shared the positive results of the project with peers and were empowered to create a bedside transition workflow that met their needs as professional nurses.

Implications

The results of the project demonstrate that implementing a bedside report process to transition patients from the ED to M/S areas improves communication, clarity of information exchanged, and patient throughput. Due to the positive impact in the ED and

M/S units, the handoff process will be expanded to include transitions from the ED to other patient care areas within the organization. As the scope of the project expands, nurses from the targeted areas will be invited to engage in the implementation process. They will be empowered to identify and remove obstacles that might hinder success. Other organizations may choose to adopt this process once the research is disseminated through presentations and publications. Patient throughput is a focus of many organizations and has been targeted as a focus of TJC. In 2012, TJC approved standard revisions addressing ED patient throughput, specifically noting ED patient flow as an organization-wide responsibility. Because Navicare reports provided a robust database for the project metrics, the use of informatics systems to track transition times may also be of interest to other organizations struggling to quantify throughput measures.

Further research is needed to determine the impact an across-unit bedside handoff process has on patient satisfaction. An evaluation of HCAHPS scores over a longer time span or the development of a tool with improved specificity that measures a patient's satisfaction with the transition process might produce different results than those reported in this project. There is also opportunity to consider the impact of a bedside handoff on safety, communication, throughput, and satisfaction for various transition types within demographically diverse organizational settings and patient care units. In order to measure patient safety as it correlates to handoffs, specific safety events that occur during patient transitions could be monitored for type, severity, and frequency pre and postimplementation of a bedside handover process.

Health care practitioners have a responsibility to ensure safety and quality when providing care for patients. The entire patient experience includes every interaction and

incident that occurs during the care continuum. As new evidence is produced that outlines effective ways to improve the experience, safety, and care for patients, health care leaders must apply it to inculcate positive social change.

Strengths and Limitations

This study had two noteworthy strengths. First, the large sample size of patient transfers between the ED and M/S units added credibility to the project findings. Second, consistent support from leadership during all phases of the project and a high level of engagement and commitment from the project design team members aided in the success of the project.

Limitations existed in the survey design and sample selection. The nurse satisfaction survey used for this study started with a Cronbach's α of 0.66 prior to the modification that occurred for the purpose of this project. Although vetted through experts for evaluation of content and face validity, further exploratory factor analysis of the nurse satisfaction survey might have been beneficial (Colliver, Conlee, & Verhulst, 2012). Because the project examined a non-randomized convenience sample in the organization where I am employed, there was potential for selection bias and limitations to generalizability (Polit & Beck, 2008). Additionally, the HCAHPS survey was sent to a random selection of patients discharged from the M/S unit and responses were not sorted by mode of arrival to the unit. Therefore, responses might not have adequately represented the sample under study. The use of a customized satisfaction survey targeted to patients who experienced the new bedside handoff process might have yielded a more representative perception of patient's satisfaction with the handoff process.

The study results began to fill a gap in the current evidence examining the impact of the hand-off process between departments. Continued examination of the impact of a bedside handoff process for transitioning patients between departments is needed. This is especially true in the area of patient satisfaction, where the handoff process had no measured impact. A larger sample size or a survey specifically measuring patients' satisfaction with the handoff process might be an opportunity for future research and yield different findings. Future studies might consider the impact of implementing a bedside report process between units in a different care setting. These results would either validate or refute the current findings.

Analysis of Self

The DNP project has positively impacted me as a scholar, practitioner, and project developer. According to the American Association of Colleges of Nursing (AACN; 2006) doctoral programs in nursing need to provide foundational competencies essential to all advanced practice roles. While I currently work in nursing leadership, I am confident the post-graduate education I received at Walden has prepared me to accept a greater role outside the organizational setting. The project allowed me to evaluate and synthesize evidence to create a new practice approach. The new approach was applied to a real clinical setting and evaluated against desired outcomes. The DNP project generated new knowledge in the profession and increased my competence as an evidence-based scholar.

As the project developed, I was required to become a change agent, building relationships with essential stakeholders in order to move the project forward and generate staff buy-in. This experience allowed me the opportunity to apply theory from

nursing and other disciplines to practice. True leaders have a responsibility to move followers beyond their personal agendas towards the achievement of team goals (Grant, 2012). At the onset of this experience, the members of the design team were hesitant and questioned how the new workflow would impact them personally. After reviewing the evidence and learning about the potential implications of a poor handoff, the team shifted their focus to the patient.

In order to complete the project, it was essential for me to develop clear objectives and adhere to a stringent timeline. As the DNP project is self-driven, personal and professional accountability are paramount to successful project completion. The feedback from the project chair and committee opened my eyes to new perspectives and pushed me outside my comfort zone. I developed increased confidence in data analysis, specifically inferential statistical approaches.

I hope to continue in organizational leadership, emphasizing interdisciplinary collaboration that focuses on quality outcomes and evidence-based approaches to delivering patient-centered care. As a DNP candidate, I have the ability, knowledge, and skills to practice and bring about positive change in a highly-evolving, complex healthcare environment (Zaccagnini & White, 2011). Future goals include dissemination of the DNP project through scholarly publication, leading research in the practice setting, and involvement in policy formation.

Summary and Conclusions

Patient handoffs are fraught with challenges, especially those occurring between care providers in different care areas (Baker, 2010). Communication continues to be the number one reason for sentinel events according to TJC (2013). Practitioners perceived

increased openness and ease of communication between the sending and receiving departments as a result of implementing a bedside report process. The RNs also felt the information exchanged in a bedside handoff between the ED and M/S units was superior because the information exchanged better prepared the receiving nurse to care for the patient. These results align with those found by Foster and Manser (2012) and Sherman, Sand-Jecklin, and Johnson (2013) when they studied the use of bedside report within a closed unit.

Lewin's change model allowed for successful implementation of a bedside reporting process using a standardized template. This change in workflow was designed by clinicians close to the practice change who were empowered to design a methodology based on evidence that could be feasibly carried out. Supportive leadership, creating a burning platform, and engaging stakeholders early in the project were essential elements to successful project completion.

Implementing a standardized bedside report process for transitioning patients between the ED and M/S units also improved patient throughput significantly. This finding positively responds to TJC standards aimed at decreasing wait times for patients and applying an organizational mindset to ED patient flow. Throughput continues to be a challenge for many organizations and no prior studies have provided evidence of how bedside report impacts this quality metric. Similarly, many health care institutes continually focus on ways to improve patient experience as a means to improve market share through word-of-mouth marketing. The IOM notes partnering with patients to plan their care as a palatable way to improve the value of the care provided. Bedside report using the ISHAPED communication template, where the patient is included in goal

setting, is one avenue to enhance the patient-provider partnership. While patient satisfaction findings were not significantly improved during this project, an extended period of HCAHPS data collection may show improvements in patients' satisfaction. To measure patient satisfaction more specifically in relationship to transitions from the ED, organizations may want to add questions to the HCAHPS survey or find and adopt a better instrument. Regardless, organizations may wish to pursue bedside report as an organizational standard for transitioning patients as it decreases transfer times, improves safety and communication, and potentially improves the patient experience.

Section 5: Scholarly Product for Dissemination

The Impact of Implementing Bedside Report to Transition Patients

Across Units

Manuscript

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Abstract

Purpose—Examine the impact of implementing a bedside report process to transition patients from the emergency department to a medical-surgical unit. The project goal was to analyze the impact of this process on patient progression and nurse and patient satisfaction.

Method—Quasi-experimental design comparing 706 pre and postimplementation patient transfer times for control and experimental medical-surgical units. The project measured nurse and patient satisfaction using pre and postimplementation survey methodology.

Findings—There was a significant difference ($p < 0.05$) between the mean transfer times in the experimental group pre and postimplementation of the bedside report process.

Nursing satisfaction, quality of report, and safety were assessed using the Transfer Report Communication Survey. There was statistically significant improvement in mean survey scores for perceived openness and ease of communication, nurses' perception of the accuracy of information exchanged, and the ability to understand the reported patient information during the handoff process after bedside report was implemented ($p < .05$).

Assessment of patient satisfaction via the Hospital Consumer Assessment of Healthcare Providers and Systems survey noted no improvement in patient satisfaction during the project timeframe ($p < .05$).

Conclusion—Implementing a bedside-reporting process to transition patients between the emergency department and medical-surgical units improves patient progression and handoff communication. The process has the potential to improve patient satisfaction.

Over 29 million patient handoffs occur annually in the United States between Emergency Department (ED) and inpatient unit staff (Hilligoss & Cohen, 2013). Each handoff offers unique challenges with regard to safety, effective communication, and patient and staff satisfaction. This paper describes how implementing a bedside handoff process to transition patients from the ED to M/S units can positively improve nurse communication, safety, and patient throughput.

Problem Background

The Joint Commission's National Patient Safety Goals (2008) challenged care providers to improve communication during handoffs. While many organizations have worked to implement safe handoff practices within units, few have focused on transitions between units or care areas (Hilligoss & Cohen, 2013). Decreased provider and patient satisfaction can occur as a result of a poor handoff process. Boev (2012) noted when nurses are satisfied, patients are more likely to be satisfied. Patients' satisfaction depends on both their experience and the quality and safety of care provided to them. If essential care elements are omitted, changed, or falsely communicated during the reporting process, significant errors may occur. In addition, this type of ineffective communication can prevent the receiving nurse from providing high quality, safe care to the patient. Hutchison, Ostbye, Barnsley, and Stewart (2003) noted long wait times as the most significant reason for patient dissatisfaction in the ED. The handoff process is frequently fraught with delays for various reasons. Some of these reasons include unavailability of nurses, and delays in bed assignment, order entry, and transport arrival. Improving the

handoff process has the potential to positively impact patient progression times and, patient and staff satisfaction.

Study Purpose

In this DNP project, I analyzed the unique challenges of between unit handoffs and measured the impact of implementing a standardized bedside report process to transition patients from the ED to an inpatient nursing unit. I specifically sought to answer the following two questions:

1. Does implementing a standardized bedside handoff between the ED and an inpatient M/S unit using a standardized process improve patient and staff satisfaction?
2. What impact does implementing a bedside handoff between the ED and an inpatient M/S unit have on patient throughput?

An extensive literature review resulted in only three articles (McFetridge, Gillespie, Goode, & Melby, 2007; Pesanka et al., 2009; Shendell-Falik, Feinson, & Mohr, 2007) specifically addressing the project questions and exploring handoffs between units. Therefore, the results of the study added to the existing body of knowledge examining handoff effectiveness. According to the literature review, potential benefits of using a bedside handoff included improved patient and nurse satisfaction, decreased patient progression times, and increased safety (Cairns, Dudjak, Hoffman, & Lorenz, 2013; Evans, Grunawalt, McClish, Wood, & Friese, 2012; Farhan, Brown, Vincent, & Woloshynowych, 2012; Foster & Manser, 2012; Friesen, Herbst, Turner, Speroni, & Robinson, 2013; Jeffs et al., 2014; Kerr, Sai Lu, & McKinlay, 2013; Sherman, Sand-Jecklin, & Johnson, 2013).

Research Design

The DNP project examining the impact of implementing a standardized bedside report process to transition patients from the ED to inpatient M/S unit used a quasi-experimental design consisting of pre and postimplementation data measurement. Recognizing that change is often difficult, Lewin's change model of unfreezing, moving, and refreezing provided the theoretical framework for the project. A representative group of staff from the ED and inpatient M/S units were selected to help design the standardized report process and workflow for the bedside handoff. Four direct care nurses selected from each unit (two from the night shift and two from the day shift), a charge nurse from each area, and the unit nurse managers comprised the project design team. The ED and M/S unit nurse managers chose these individuals because of their interest in the work and previous unit engagement in leading new initiatives. To gain an appreciation for each other's workload, nurses from the design group spent time in the ED and M/S areas shadowing. RNs from the ED shadowed the M/S design team members in the M/S unit. M/S design team members shadowed ED design team members in the ED. The shadowing periods ranged from 4 to 8 hours in length. This experience aided in both the unfreezing and moving phases of the project. The group chose to adopt Friesen, Herbst, Turner, Speroni, and Robinson's (2013) ISHAPED (I = Introduce, S = Story, H = History, A = Assessment, P = Plan, E = Error Prevention, and D = Dialogue) report structure for all handoffs within the organization.

One M/S unit served as the experimental group and used the ISHAPED format to give bedside report for patients admitted to the unit from the ED. A second M/S unit served as the control group and used the same ISHAPED format to provide a telephoned

report for patients transitioned to the unit from the ED. The study examined the impact of a standardized bedside report on the dependent variables of patient progression times, nurse satisfaction, and patient satisfaction.

Population and Sampling

The project took place at a 520-bed non-profit teaching hospital in a large urban area. Attempting to implement a bedside report process on all ED admissions was too great an undertaking for the scope of this study. Because 60% of ED patients are admitted to the M/S units selected to participate in this project, these units were believed to be a representative sample. All RNs employed in the ED or M/S unit and all patients seen in the ED and admitted to the experimental M/S unit were asked to participate voluntarily. They had the option to decline the invitation without consequence. The data collected for analysis included survey responses from an average of 80% of the nursing staff in each department and information on 706 patient transitions.

Data Collection

Pre and postimplementation data were collected through several means. Patient and staff satisfaction data were collected via surveys with demonstrated reliability and validity (Centers for Medicare and Medicaid Services, 2013; James et al., 2013). The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) (Centers for Medicare and Medicaid Services, 2013) survey was used to measure patient satisfaction and The Medical Intensive Care Unit (MICU) Report Communication Scale with modification (James et al., 2013) was used to measure nurse satisfaction with the handoff process. The HCAHPS survey was administered by Press Ganey and no patient consent was required for its use. Press Ganey randomly selected patients to receive the

HCAHPS survey by mail or e-mail after discharge. Because many things may influence patient satisfaction, a journal of organizational initiatives and events was kept to help explain any other potential positive or negative influences on patient satisfaction.

The MICU Report Communication Scale was renamed and slightly modified with permission of the original author, Jukkala (personal communication March 11, 2014). For this study, it was named the Transfer Report Communication Survey. The word MICU in the original survey was replaced with the words sending/receiving unit in the revised survey to better reflect the units in the study. The survey specifically assessed if the information communicated by the ED nurse to the M/S nurse was perceived to prepare the clinician adequately to care for the patient. This survey was administered via Survey Monkey so nurses could choose to participate or decline anonymously.

Navicare is an informatics tool used within the organization to track patient throughput. Patient progression data were obtained from Navicare reports noting the patient census, when a clean and ready bed was assigned to the patient in the ED, when the admission orders were written, when the nursing handoff occurred, and when the patient arrived in the inpatient unit. Kronos is the organization's time and attendance, scheduling, and labor tracking system. Staffing reports were pulled from this electronic scheduling system in an effort to explain throughput outliers such as times of unusual delay or efficiency. All data were collected pre and postimplementation of the bedside report process.

Data Analysis

Survey responses were entered into an Excel spreadsheet and then analyzed using the Statistical Package for Social Sciences (SPSS) 20 software. A dependent-sample *t*

test was used to evaluate if there was a statistically significant difference in patient and nurse satisfaction mean scores before and after the implementation of bedside report. Data regarding patient progression times were analyzed using an independent-sample t test to compare mean transfer times of the control and experimental M/S units.

Analysis by t test of HCAHPS top box scores, comparing the percentage of respondents who chose the top score of *always* on a Likert scale ranging from *never* to *always*, revealed no significant difference in patient satisfaction pre and postimplementation of the bedside report process. In the 2-month period prior to implementation of the bedside transition process, 43 patients from the M/S unit returned surveys. Postimplementation, 44 surveys were returned over a 2-month period.

Dependent-samples t test revealed no improvement in responses to the three questions analyzed. Patients did not feel nurses treated them with courtesy and respect more after implementation of the bedside report process ($M = 80.93$, $SD = 1.27$) than prior to implementation ($M = 73.24$, $SD = 2.54$), $t(1) = 8.56$, $p = 0.07$. The same was true of patients' rating of nurses' ability to listen carefully post- ($M = 85.12$, $SD = 8.77$) and preimplementation ($M = 84.91$, $SD = 7.99$), $t(1) = 0.021$, $p = 0.99$, and the frequency of nurses' explaining things in a way patients could understand post- ($M = 74.10$, $SD = 5.86$) and preimplementation ($M = 70.30$, $SD = 5.09$), $t(1) = 7.00$, $p = 0.56$.

The questions on the HCAHPS survey assessed overall patient satisfaction and lacked the specificity to measure patients' satisfaction with the transition process independently of all other hospital experiences. This limitation most likely influenced the results of the data analysis. According to Radtke (2013) patient satisfaction is measured as the summation of everything a patient experiences during their hospital stay.

Therefore, establishing a causal relationship between one process change and an improvement in satisfaction is challenging.

Nursing satisfaction, quality of report, and safety were assessed using the Transfer Report Communication Survey. There were 37 RNs in the ED and 39 RNs in the M/S unit eligible to take the survey. Seventy-eight percent of ED nurses responded to the preimplementation survey and 84% responded to the postimplementation survey. M/S had similar RN response rates with 85% responding to the preimplementation survey and 80% responding to the postimplementation survey. The responses were normally distributed and demonstrated a power level of 0.26 to 0.84 with a significance of 0.05. The majority of nurses on both units were BSN prepared (ED = 76%; M/S = 72%) and had a mean of 7 years of nursing experience. Most RNs were female (ED = 68%; M/S = 92%) and all worked greater than 32 hours per week.

The mean score for all survey questions ranged from 1.71 to 2.78 (*SD* ranged from 0.46-0.86) on the preimplementation survey and from 1.52 to 2.74 on the postimplementation survey (*SD* ranged from 0.51-0.84) on a scale of 1 = *strongly agree* to 4 = *strongly disagree*. Initially, only half of the nurses *strongly agreed* or *agreed* it was easy to talk to nurses from the other units and 44% *strongly agreed* or *agreed* that communication was open, compared to 70% and 56% on the postimplementation survey. Dependent sample *t* test analysis of the survey mean scores are presented in Table 8.

There was statistically significant improvement, at the 0.05 significance level, in pre and postimplementation survey scores for perceived openness and ease of communication. The findings also demonstrated significant improvement in nurses' perception of the accuracy of information exchanged and the ability to understand the

reported patient information during the handoff process after bedside report was implemented to transition patients between the ED and M/S units. These findings suggest an increase in teamwork, ability to work together across the two departments, and an improved accuracy and understanding of the exchanged information occurred as a result of the new reporting process. This improved level of communication may lead to a higher level of patient safety by decreasing the incidence of miscommunication and wrongful reporting of patient information during the handoff process.

Table 8

Descriptive and t Test Statistics Analysis of Communication in Response to the Bedside Report Process

Outcome	Pretest		Posttest		n	95% CI for Mean Difference		t	df	p
	M	SD	M	SD						
Enjoy talking to RN from sending/receiving unit	2.39	0.86	2.33	0.81	61	-0.48	0.18	1.15	60	0.251
It is easy to ask advice	2.49	0.87	2.44	0.79	61	-0.60	0.16	0.90	60	0.370
It is easy to talk openly	2.46	0.87	2.28	0.84	61	0.06	0.30	3.02	60	0.004
Communication is open	2.62	0.86	2.46	0.83	61	0.07	0.26	3.43	60	0.001
Information exchanged is not accurate	2.39	0.83	2.49	0.79	61	-0.18	-0.02	-2.56	60	0.013
RNs don't understand received information	2.3	0.74	2.51	0.79	61	-0.33	-0.10	-3.69	60	0.000
Received report prepares me adequately	2.45	0.68	2.42	0.76	31	-0.12	0.18	0.44	30	0.662
I often need to validate the information	1.61	0.67	1.81	0.79	31	-0.34	-0.05	-2.68	30	0.012
The report given adequately prepares the RN	1.71	0.47	1.52	0.51	27	0.03	0.34	2.43	26	0.022
I often need to recheck the information given	2.78	0.70	2.74	0.59	27	-0.17	0.24	0.37	26	0.713

At the time of this project, there were no published studies examining the impact of a bedside-reporting process on patient progression. The closest relevant information evaluated the impact of bedside report on nursing overtime, patient length of stay, and nursing report time (Anderson & Mangino, 2006; Cairns et al., 2013; and Evans et al., 2012). This is the first study to examine the impact of a bedside-reporting process on patient progression.

Navicare, an informatics tool used within the organization to track patient throughput, provided patient progression information for the M/S unit under study and the M/S unit used as the control for the project. A total of 706 patient transitions, occurring over a 4-month period, were included in the data analysis for this project. Three hundred and fifty-six transitions occurred during the 2 months prior to project implementation, and 350 transitions occurred postimplementation. Daily Navicare reports provided time stamps for when a clean and ready bed was assigned to the patient in the ED, when the admission orders were written, when the nursing hand-off occurred, and when the patient arrived in the inpatient unit. For the purpose of this project, the transfer time was defined as the time when a clean and ready bed was assigned and admission orders were written until the time the patient arrived in the assigned inpatient unit bed and the hand-off process was completed. Fourteen percent (100/706) of the transitions were audited through a manual process in order to validate the accuracy of the report data. Only four discrepancies were found between the canned report and the manual auditing, noting a difference ranging from 2 to 8 minutes between the actual and reported time the admission orders were written. This discrepancy was not significant. Therefore, the report data were considered accurate for use in the data analysis.

Mean transfer times in conditions with and without utilization of a bedside report process were comparatively evaluated using an independent-samples *t* test. Plotting of the data in a histogram demonstrated normal distribution. Homogeneity of variances was demonstrated for all comparative data using Levine's test for equality of variances ($p > 0.05$). There was no difference between the mean transfer times in the control group during the 2 months prior to project implementation ($M = 92.21, SD = 56.45$) and the 2 months postimplementation ($M = 95.63, SD = 58.24$); $t(373) = 0.58, p = 0.57$. This is an expected finding as the handoff process, consisting of a standardized ISHAPED telephoned report between the ED and inpatient M/S unit, remained unchanged throughout the duration of the project. There was a significant difference between the mean transfer times in the experimental group during the 2 months prior to the implementation of the bedside report process ($M = 94.43, SD = 52.31$) and the 2 months postimplementation ($M = 79.63, SD = 46.23$); $t(329) = -2.73, p = 0.007$. These findings suggest that implementing a bedside report process to transition patients from the ED to inpatient unit has a positive impact on patient progression by significantly reducing patient transfer times. This reduction in throughput time may also potentially improve patient satisfaction given that long wait times have been identified as a primary cause of patient dissatisfaction (Beach et al., 2012)

Discussion

The results of the project demonstrated that implementing a bedside report process to transition patients from the ED to M/S areas improves communication, clarity of information exchanged, and patient throughput. Due to the positive impact in the ED and M/S units, the handoff process will be expanded to include transitions from the ED to

all patient care areas within the organization. As the scope of the project expands, nurses from the targeted areas will be invited to engage in the implementation process. They will be empowered to identify and remove obstacles that might hinder success. Lewin's change model was an extremely effective framework for this project.

The process developed through this project might be valuable to others. Patient throughput is a focus of many organizations and has been identified as a priority by TJC. In 2012, TJC approved standard revisions addressing ED patient throughput, specifically noting ED flow as an organization-wide responsibility. Because Navicare reports provided a robust database for the project metrics, the use of informatics systems to track transition times may also be of interest to those struggling to quantify patient throughput metrics.

Further research evaluating the impact of a bedside report process for transitions between units on patient satisfaction is needed. Findings regarding HCAHPS-measured patient satisfaction were not significantly improved during the timeframe of the project. An evaluation of HCAHPS over a longer time span or the development of a tool with improved specificity that considers a patient's satisfaction with the transition process, is recommended. Because the HCAHPS survey is sent to a random selection of patients discharged from the M/S units and responses are not sorted by mode of arrival to the unit, replies might not have represented adequately the sample under study. The use of a customized satisfaction survey targeted to patients who experienced the new bedside handoff process might have yielded a more representative perception of patients' satisfaction with the handoff process.

There is also opportunity to consider the impact of a bedside handoff on safety, communication, throughput, and satisfaction for various transition types within demographically diverse organizational settings and patient care unit. In order to measure patient safety as it correlates to handoffs, specific safety events that occur during patient transitions could be monitored for type, severity, and frequency pre and postimplementation of a bedside handover process.

The large sample size of patient transfers between the ED and M/S units was a strength of this study. Consistent support from leadership during all phases of the project and a high level of engagement and commitment from the project design team members aided in the success of the project. The nurse satisfaction survey used for this study started with a Cronbach's α of 0.66 prior to modification for the purpose of this project. Although vetted through experts for evaluation of content and face validity, further exploratory factor analysis of the nurse satisfaction survey might have been beneficial (Colliver, Conlee, & Verhulst, 2012). Because the project examined a non-randomized convenience sample in the organization where I am employed, there was potential for selection bias and limited generalizability (Polit & Beck, 2008).

The study results began to fill a gap in the current evidence examining the impact of the hand-off process between departments. Continued examination of the impact of a bedside handoff process for transitioning patients between departments is needed. This is especially true in the area of patient satisfaction where the handoff process had no impact. A larger sample size or focused survey might be an opportunity for future research and yield different findings. These results would either validate or refute the current findings.

Conclusion

Patient handoffs are met with unique communication challenges. Focused effort on enhancing and improving these processes has the potential to increase patient and staff satisfaction and positively impact patient progression. Communication continues to be the number one reason for sentinel events according to TJC (2013). Implementing a bedside report process resulted in open and effortless communication between practitioners in the ED and M/S units. The RNs also felt the information exchanged during the bedside handoff was easily understood and accurate. Improvements in patient throughout were also realized as a result of using a standard bedside report to transition patients between departments. Lewin's change model allowed for successful implementation and enculturation of the new bedside-reporting process. Supportive leadership, creating a persuasive argument for change, and engaging stakeholders early in the process were essential elements to successful project completion.

Throughput continues to be a challenge for many organizations and no prior studies have provided evidence of how bedside report impacts this quality metric. While the findings related to patient satisfaction were inconclusive, an extended period of HCAHPS data collection could show improvements in patients' satisfaction. Regardless, organizations may wish to pursue bedside report as an organizational standard for transitioning patients as it decreases transfer times, improves safety and communication, and potentially improves the patient experience.

References

- American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. Retrieved from <http://www.aacn.nche.edu/publications/position/DNPEssentials.pdf>
- Anderson, C. D., & Mangino, R. R. (2006). Nurse shift report: Who says you can't talk in front of the patient? *Nursing Administration Quarterly*, *30*(2), 112–122.
- Beach, C., Cheung, D. S., Apker, J., Horwitz, L. I., Howell, E. E., O'Leary, K. J., ... Williams, M. (2012). Improving interunit transitions of care between emergency physicians and hospital medicine physicians: A conceptual approach. *Academic Emergency Medicine*, *19*(10), 1188–1195. doi:10.1111/j.1553-2712.2012.01448.x
- Boev, C. (2012). The relationship between nurses' perception of work environment and patient satisfaction in adult critical care. *Journal of Nursing Scholarship*, *44*(4), 368–375. doi:10.1111/j.1547-5069.2012.01466.x
- Cairns, L., Dudjak, L., Hoffman, R., & Lorenz, H. (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
- Centers for Medicare and Medicaid Services. (2010). Medicare and Medicaid EHR incentive program: Meaningful use Stage I requirements overview. Retrieved from https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/MU_Stage1_ReqOverview.pdf
- Centers for Medicare and Medicaid Services. (2012). CMS makes changes to improve quality of care during hospital inpatient stays. Retrieved from <http://www.cms.gov/apps/media/press/factsheet.asp?Counter=4422>

Centers for Medicare and Medicaid Services. (2013). HCAHPS update training.

Retrieved from http://www.hcahpsonline.org/Files/March%202013%20HCAHPS%20Update%20Training%20Slides_3-6-13.pdf

Colliver, J. A., Conlee, M. J., & Verhulst, S. J. (2012). From test validity to construct validity ... and back? *Medical Education*, *46*(4), 366–371. doi:10.1111/j.1365-2923.2011.04194.x

Coonan, C. (2013). *Implementation of structured bedside handoff report on the general pediatrics unit* (MSN thesis). Available from ProQuest Theses and Dissertations Full Text database. (UMI No. 1346707067)

Evans, D., Grunawalt, J., McClish, D., Wood, W., & Friese, C. R. (2012). Bedside shift-to-shift nursing report: Implementation and outcomes. *Medsurg Nursing*, *21*(5), 281–284, 292. Retrieved from <http://www.medsurnursing.net/cgi-bin/WebObjects/MSNJournal.woa>

Farhan, M., Brown, R., Vincent, C., & Woloshynowych, M. (2012). The ABC of handover: Impact on shift handover in the emergency department. *Emergency Medicine Journal: EMJ*, *29*(12), 947–953. doi:10.1136/emmermed-2011-200201

Foster, S., & Manser, T. (2012). The effects of patient handoff characteristics on subsequent care: A systematic review and areas for future research. *Academic Medicine*, *87*(8), 1105–1124. doi:10.1097/ACM.0b013e31825cfa69

Friesen, M. A., Herbst, A., Turner, J. W., Speroni, K. G., & Robinson, J. (2013). Developing a patient-centered ISHAPED handoff with patient/family and parent advisory councils. *Journal of Nursing Care Quality*, *28*(3), 208–216. doi:10.1097/NCQ.0b013e31828b8c9c

- Grant, A. M. (2012). Leading with meaning: Beneficiary contact, prosocial impact, and the performance effects of transformational leadership. *Academy of Management Journal*, 55(2), 458–476. Retrieved from <http://aom.org/AMJ/>
- Hilligoss, B., & Cohen, M. D. (2013). The unappreciated challenges of between-unit handoffs: Negotiating and coordinating across boundaries. *Annals of Emergency Medicine*, 61(2), 155–160. doi:10.1016/j.annemergmed.2012.04.009
- Houser, J. (2008). *Nursing research: Reading, using and creating evidence*. Sudbury, MA: Jones and Bartlett.
- Hutchison, B., Ostbye, T., Barnsley, J., & Stewart, M. (2003). Patient satisfaction and quality of care in walk-in clinics, family practices and emergency departments: The Ontario Walk-in clinic study. *Canadian Medical Association Journal*, 168(8), 977–983. Retrieved from <http://www.cmaj.ca/>
- Ishmael, S., & Manley, J. (2011). Incorporating bedside handoff: Using evidence-based practice to improve communication and decrease errors. *Journal of Pediatric Nursing*, 26(2), e5–e6. doi:10.1016/j.pedn.2010.12.029
- James, D., Jukkala, A., Azuero, A., Autrey, P., Vining, L., & Miltner, R. (2013). Development of the medical intensive care unit shift report communication scale as a measure of nurses' perception of communication. *Nursing: Research & Reviews*, 3, 59–65. doi:10.2147/NRR.S42000
- Jeffs, L., Beswick, S., Acott, A., Simpson, E., Cardoso, R., Campbell, H., & Irwin, T. (2014). Patients' views on bedside nursing handover: Creating a space to connect. *Journal Of Nursing Care Quality*, 29(2), 149–154. doi:10.1097/NCQ.0000000000000035

- Kerr, D., Sai Lu, & McKinlay, L. (2013). Bedside handover enhances completion of nursing care and documentation. *Journal of Nursing Care Quality*, 28(3), 217–225. doi:10.1097/NCQ.0b013e31828aa6e0
- Laws, D., & Amato, S. (2010). Incorporating bedside reporting into change-of-shift report. *Rehabilitation Nursing*, 35(2), 70–4. Retrieved from <http://search.proquest.com.ezp.waldenulibrary.org/docview/218310999/141D5A18959772D9DC2/7?accountid=14872>
- Maxson, P. M., Derby, K. M., Wroblewski, D. M., & Foss, D. M. (2012). Bedside nurse-to-nurse handoff promotes patient safety. *MEDSURG Nursing*, 21(3), 140–145. Retrieved from <http://www.medsurnursing.net/cgi-bin/WebObjects/MSNJournal.woa>
- McFetridge, B., Gillespie, M., Goode, D., & Melby, V. (2007). An exploration of the handover process of critically ill patients between nursing staff from the emergency department and the intensive care unit. *Nursing in Critical Care*, 12(6), 261–269.
- Newhouse, R., Dearholt, S., Po, S., Pugh, L., & White, K. (2007). *John-Hopkins Nursing Evidence Based Practice Model and Guidelines*. Indianapolis, IN: Honor Society of Nursing.
- Newman, K., & Maylor, U. (2002). Empirical evidence for “the nurse satisfaction, quality of care and patient satisfaction chain.” *International Journal of Health Care Quality Assurance*, 15(2/3), 80–88. Retrieved from <http://www.emeraldinsight.com/journal/ijhcqa>
- Pesanka, D., Greenhouse, P., Rack, L., Delucia, G., Perret, R., Scholle, C., ... Janov, C.

- (2009). Ticket to ride: Reducing handoff risk during hospital patient transport. *Journal of Nursing Care Quality*, 24(2), 109–115.
doi:10.1097/01.NCQ.0000347446.98299.b5
- Polit, D., & Beck, C. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Radtke, K. (2013). Improving patient satisfaction with nursing communication using bedside shift report. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 27(1), 19–25. doi:10.1097/NUR.0b013e3182777011
- Riesenberg, L. (2010). Nursing handoffs: A systematic review of the literature. *The American Journal of Nursing*, 110(4), 24–6.
doi:10.1097/01.NAJ.0000370154.79857.09
- Sackett, D., Strauss, S., Richardson, S., Rosenberg, W., & Haynes, R. (2000). *Evidence-based medicine: How to practice and teach evidence based medicine* (2nd ed.). London, UK: Churchill Livingstone.
- Sand-Jecklin, K. E., & Sherman, J. M. (2013). Incorporating bedside report into nursing handoff: Evaluation of change in practice. *Journal of Nursing Care Quality* April, 28(2), 186–194. doi:10.1097/NCQ.0b013e31827a4795
- Shendell-Falik, N., Feinson, M., & Mohr, B. J. (2007). Enhancing patient safety: Improving the patient handoff process through appreciative inquiry. *Journal of Nursing Administration* February 2007, 37(2), 95–104. Retrieved from <http://journals.lww.com/jonajournal/Pages/default.aspx>
- Sherman, J., Sand-Jecklin, K., & Johnson, J. (2013). Investigating bedside nursing report: A synthesis of the literature. *Med-Surg Matters*, 22(5), 308–318. Retrieved from

<https://www.amsn.org/newsletter>

Smeulders, M. (2012). Effectiveness of different nursing handover styles for ensuring continuity of information in hospitalized patients. *Cochrane Database of Systematic Reviews*, (7). doi:10.1002/14651858.CD009979.pub2

The Joint Commission. (2012). Approved: Standards revisions addressing patient flow through the ED. *Joint Commission Perspectives*, 32(7), 1–5. Retrieved from http://www.jointcommission.org/assets/1/6/Std_Rev_Patient_Flow.pdf

The Joint Commission. (2008). National patient safety goals: Handoff communications: standardized approach (No. 02.05.01). Retrieved from http://www.jointcommission.org/AccreditationPrograms/Hospitals/Standards/09_FAQs/NPSG/Communication/NPSG.02.05.01/hand_off_communications.htm

The Joint Commission. (2012, June). Transitions of care: The need for a more effective approach to continuing patient care. The Joint Commission. Retrieved from http://www.jointcommission.org/assets/1/18/Hot_Topics_Transitions_of_Care.pdf

The Joint Commission. (2013). Most frequently identified root causes of sentinel events reviewed by the joint commission by year. The Joint Commission. Retrieved from http://www.jointcommission.org/assets/1/18/Root_Causes_by_Event_Type_2004-2Q2013.pdf

World Health Organization Collaborating Center for Patient Safety Solutions. (2007). Communication during patient handoffs. Retrieved from <http://www.ccforspatientsafety.org/common/pdfs/fpdf/presskit/PS-Solution3.pdf>

Zaccagnini, M., & White, K. (2011). *The Doctor of nursing practice essentials: A new*

model for advanced practice. Sudbury, MA: Jones and Bartlett.

Appendix A: Literature Review Matrix

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
Anderson and Mangino, 2006	To describe the process for bedside report implementation at a 600 bed medical center and identify the outcomes impacted by this change	Staff and patients on a 36 bed general surgical unit; sample size not reported	Quasi-experimental, descriptive	Results demonstrated a 100 hour reduction in incidental worked time per pay period. Anecdotal evidence and survey results noted improved patient satisfaction and licensed staff satisfaction.	The authors provided well defined theoretical frameworks for bedside report implementation, citing King's theory of goal attainment and Bridge's work on change management. The process for design and implementation was detailed and could be easily replicated. Unfortunately, the writers provided anecdotal evidence to support their findings with the exception of data reflecting worked hours after the end of the shift. Graphs of the survey results were provided, but did not reflect inferential statistical analysis of the results to determine significance. This study's findings were weak.	2-C
Cairns, et al., 2013	To determine the impact of the shift report process on: overtime, patient involvement, frequency of call bells during change of shift, and resolution of limitations associated with the previous handoff process.	Data collection over a 6 month period (3 months pre and 3 months post). Surveys from 29 nurses pre intervention and 18 nurses post intervention.	Survey, quasi-experimental	Redesigning the report process resulted in reduced overtime and a reported increase in report effectiveness by nurses. Patient satisfaction was not significantly changed.	Literature was used to provide background information for the study. No literature analysis was included. The methodology was clearly outlined. However, data analysis included no statistical evaluation of the results and the sample size was small, making validity of the results questionable. The investigators sought to identify the patient's perceptions related to the new handoff process. Unfortunately, this aspect was not discussed in the results section. Despite poor design, the conclusions made aligned with other findings in the literature.	2-C

(table continues)

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
Evans, et al., 2012	To determine the impact of bedside shift-to-shift report on nurse satisfaction and time spent in report	Shift-to-shift reports and survey of staff. Sample size not reported	Observation	There was a noted improvement in nurse satisfaction, decreased report time resulting in a decrease in incidental overtime, and increased patient involvement in their care.	Literature review was clear and ample. Sample was not well defined and no sample size was provided. Data were presented in a way that does not validate findings or allow confidence in the results. The survey used was not validated and reliability was questionable. The methodology was not well described. Despite a low quality of evidence, this study did not align with the findings of other high quality study findings.	3-C
Farhan, et al., 2012	To assess the impact of implementing the “ABC of Handover” in the emergency department on clinical and organizational practice.	Observations: 41 pre-, 42 postimplementation	Prospective observation study	The “ABC of Handover” significantly improved the relevant information communicated during handoffs.	Some background literature was included. The methodology lacked reliable and valid measurement tools and therefore, might negatively impact the quality of the evidence. Statistical analysis was logical and <i>p</i> -levels were clearly linked to the hypothesis. Unfortunately, the authors were unable to link the use of the tool to changes in clinical practice due to many variables that could not be excluded from the findings. Further research was needed to conclude if the “ABC Handover Tool” positively improved clinical practice.	2-B
Foster and Manser, 2012	To provide a summary of the available evidence on handoffs and how they impact outcomes	18 articles identifying 37 outcomes. Articles were published prior to 2010 and included information on handoffs and their link to outcomes	Literature review	Noted that standardized handoffs decreased errors, number of missed tasks, and frequency of lost patient information. Standardized handoffs also resulted in increased information retention, and frequency of first dose of meds given on time	The selection process for article inclusion was defined and logical. Most of the findings were based on observational or quasi-experimental studies. The findings in the literature were heterogeneous and underdeveloped. The included articles examined handoffs by all disciplines, not just nursing. The listed benefits of standardized handoffs might have been biased by educational background and training. There was ample replication of results to support further research.	4-B

(table continues)

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
Friesen, et al., 2013	To explore patient's perceptions of the ISHAPED bedside shift handoff.	Surveys from 93 patients and 14 parents of pediatric patients; Interviews of 16 patients and 6 parents of patients	Survey and interviews; descriptive	Qualitative analysis identified 5 themes. The patients appreciated an introduction to their new nurse, felt communication from one care giver to another required collaboration, wanted to be involved in their care, required explanations in simple terms that were easily understandable and valued open communication over privacy	A literature search was described, but quality of the evidence used to develop the ISHAPED handoff tool was not apparent. The researchers did not provide survey reliability or validity. This detracted from the believability of the survey results. Qualitative analysis of patient and parent interviews met standard research rigor. The sample, despite coming from one organization, was representative of typical patient populations within inpatient care settings. Therefore, the themes identified through qualitative analysis could be confidently applied to diverse clinical settings. The study provided relevant information to inform practice.	3-B
Jecklin, and Sherman 2013	To determine the impact of bedside report on patient and nurse perception of involvement, accountability, communication, patient falls, and medication errors.	552 patient/family member: 302 pre and 250 post implementation 246 nurses: 148 pre and 98 post implementation	Survey; descriptive analysis	Results demonstrated improved patient perception of involvement and nurse communication. Noted improvement in nurse perceptions of accountability and patient involvement also occurred post implementation of bedside report. There was no statistical improvement in falls or medication errors.	A comprehensive review of the literature supported justification for the study. No theoretical framework was identified. A large convenience sample was collected representing medical-surgical patient units. Therefore, the results were generalizable to like populations. An in-depth description of methodology was included and the authors included validity and reliability data for one of the two surveys used. Statistical analysis of the results was appropriate and the findings validated those found in other studies. Overall, the study contributed new information to the profession.	2-B

(table continues)

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
Jeffs, et al., 2014	To investigate patients' perceptions of bedside handoffs	45 patients in an inner city teaching hospital in Canada	Interview	Patients identified three themes through the interview process. Bedside report: 1. Provided a chance for personal connection with caregivers, 2. Allowed patients to be informed and knowledgeable of the care plan, 3. Was not always seen as a positive experience	The article provided an extensive literature analysis to support the work. The methodology was clearly described and used standard interview questions. The only two individuals conducting interviews received extensive training and were evaluated through observation of the interview process prior to study implementation. Auditing of the data was completed as an extra step to ensure rigor. The results were clearly explained and replicate findings from other studies assessing patient perceptions of the bedside report process. The study noted varying exposure of patients to the bedside report process. This could have negatively impacted the findings. Of note, the study was done in Canada and may not be generalizable to other geographic locations.	3-B
Kerr, Lu, and McKinley, 2013	To determine if bedside handover improved completion of defined nursing tasks and documentation	5 handover episodes in 3 different nursing wards pre and Postimplementation; n=30 754 medical record reviews; 381 pre and 373 post intervention	Pre/post intervention observation and medical record review	No significant change in handover duration was observed. There was a significant improvement in presence of allergy bands, administration of prescribed medications, and labels on medication charts post implementation. With the exception of pressure ulcer prevention, significant improvement was noted in all selected nursing documentation metrics.	The included literature review identified a gap in the literature examining the impact of bedside report on completion of nursing tasks and documentation, which this study addressed. The methodology was well defined and statistical analysis was of high standard. There was bias due to small convenience sample. Nurses were aware data collection was occurring. Therefore, some of the noted improvement might have been a result of the Hawthorne effect. Overall, The results were believable and added new knowledge regarding the impact of bedside handover. They were consistent with other findings in the literature.	2-B

(table continues)

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
Laws and Amato, 2010	To describe how implementing bedside report improves patient involvement and safety	Registered nurses on one inpatient stroke unit	Pre-post- survey	Post implementation survey results demonstrated nurses felt bedside report increased patient safety, provided more opportunity for patients to be involved in their care, and fostered teamwork and staff accountability. Post survey results noted a perceived increase in report time and decrease in patient confidentiality.	The literature review provided an argument for implementing bedside report, noting benefits to patients and staff. Evaluation of evidence strength was not provided. The sample size was not provided and included nurses from one unit. Survey reliability or validity was not addressed and there was no statistical evaluation of the survey results. The method for survey administration was absent. The results did not support the purpose of the study. They represented only the perception of nurses and not actual outcomes. Due to a small and specialized sample, the results were not generalizable.	3-C
Maxson, et al., 2012	To determine if bedside report improves patient satisfaction and perception of teamwork and nurse satisfaction with accountability and communication.	60 patients: 30 pre- and 30 post- implementatio n 5 staff members	Written survey	Bedside nurse-to-nurse handoffs had a positive impact on patient and staff satisfaction, nurse accountability, and medication reconciliation.	The article included a comprehensive literature review. The survey did not undergo reliability or validity testing. Survey results underwent appropriate statistical analysis and included <i>p</i> values. Findings were significant. The sample size was small and represented only one patient population. Therefore, more research was needed to confirm generalization to all patients. This study contributed to the body of knowledge on the benefits of bedside report.	2-C

(table continues)

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
McFetridge, et al., 2007	Explore the handoff process between the ED and ICU	20 RNs in 2 Ireland hospitals	Medical record review, Interviews, focus groups	Qualitative analysis identified 6 themes. ED and ICU nurses felt: <ul style="list-style-type: none"> • Handover was integral in care continuity • The process lacked standardization Important information was sometimes missing • There was no agreed upon start and stop to the handoff 	A small scale literature review was included and noted the lack of available evidence on across unit handoffs. The study design was not well described and the content of the interviews and focus groups was not disclosed in the article. Due to small sample size, a lack of rigor, and unclear data collection methods, the study results were not sufficient to base conclusions. However, this was one of few articles that addressed across unit handoffs.	3-C
Pesanka, et al., 2009	To establish a standardized process that promotes safety and respect, is patient centered, and fosters closed-loop communication for the transport of patients	Not well defined. All patients transported using the new process	Survey, self reporting of errors	Press Ganey scores improved from 84.9-86.1 percentile rank, emergency responses to patients during transport decreased 43%, and safety events involving oxygen decreased	The literature review provided a strong argument for the process change developed. The study purpose was clear, but the sample was poorly defined. The authors used different time frames for each part of the data set. Press Ganey survey results were used as a measure of patient satisfaction, but improvement might not be a direct result of the transport process change. No statistical analysis was used to evaluate results. This was one of few articles in the literature examining handoffs across transitions.	3-C

(table continues)

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
Riesenberg, Leitzsch, and Cunningham , 2010	To identify qualities of structured handoffs that are effective and identify barriers to effective handoffs	20 articles written in English between 1987 and 2008 within the search databases and focused on nursing handoffs within the United States	Literature review	Reviewers noted a lack of high quality studies. Communication was most often seen as a barrier to effective hand-offs. Standardization was the most often identified quality of an effective hand-off. SBAR was a mnemonic most often used in a standard hand-off process.	The reviewers used a well defined search and selection process that included interrater reliability statistics. The process could be easily replicated and would likely produce similar results. Despite this rigor, there was a lack of high quality evidence. The reviewers included all types of handoffs and not just those occurring at the bedside. Therefore, the findings, while inclusive, were too broad for application to one type of handoff.	4-C
Scott, et al., 2012	To identify evidence based practice for handover and any research gaps	82 articles published in CINAHL, PubMed, and Cochrane library between 2000 and 2010: 29 implementatio n studies, 13 conceptual models, 5 subject reviews, and 35 background papers	Narrative synthesis	Identified 9 guiding principles to inform the handover process: <ul style="list-style-type: none"> • Structured process • Use of technology • Communication skills • Listen and inform versus direct and tell • Cultural concerns • Continuous quality improvement • Common language across disciplines • Patient involvement • Indirect functions 	Inclusion criteria were limited to handover as the only search term. This might have excluded high quality evidence. Studies were primarily qualitative in nature, using descriptive rather than inferential statistical analysis. Although the included studies lack rigor, they were representative of the current research base. The 9 principles for implementation were generalizable and consistent enough to be applied in a broader scope. However, more quantitative analysis is recommended.	4-B

(table continues)

Author/ Date	Aim	Sample	Methodology	Analysis & Results	Strengths and Weaknesses	Level of Evidence
Shendell-Falik, Feinson, and Mohr, 2007	To use appreciative inquiry to redesign the handoff process between the emergency department (ED) and telemetry unit	Nurses in the ED and telemetry unit	Interview, survey	Deliverables of redesign: welcome script, standard hand-off, initiation of safety assessment in ED, transport protocol for cardiac patients, improved relationships between departments. Outcomes noted improved patient and staff satisfaction, increased compliance with lab completion and medication administration.	The author did a good job using literature to support the need for handover redesign. The methodology of the redesign was well defined and supported by the theory behind appreciative inquiry. The outcome metrics were vague and difficult to measure. No explanation of how measurement was achieved was included. Therefore, results might not be valid. Despite poor design, the article was one of few specifically addressing handoff processes between the ED and telemetry unit.	5-C
Sherman, Sand-Jecklin, and Johnson, 2013	To investigate pros and cons of bedside nursing report as identified in the literature	Review of databases between 1975 and 2011 resulted in 12 articles providing qualitative or quantitative data on outcomes of bedside report	Evidence summary	Findings noted for patients: <ul style="list-style-type: none"> • More informed, involved • Increased satisfaction, safety • Decreased falls • Earlier discharge • Lack of privacy • Medical jargon confusion • Increased anxiety if information incorrect Findings noted for staff: <ul style="list-style-type: none"> • Fatigue from hearing repetitive information • Mentoring opportunities opportunities • Increased efficiency, teamwork, accountability, accuracy • Increased time requirement 	The methodology for the literature review was logical and inclusive. Unfortunately, the studies reviewed lacked adequate sample size, and research rigor. Half of the studies reviewed provided no information on sample size. Therefore, although the studies noted positive results from the implementation of bedside report, the results were not generalizable. While the review noted various outcome measures, minimal replication of specific metrics was evident in the literature. More research was needed to determine the impact of bedside report on patient outcomes, specifically quantitative metrics.	4-C

Appendix B: The Impact of Implementing Bedside Report to Transition Patients From
the Emergency Department to the Inpatient Unit

Written Statement of Research for Clinicians

You are being asked to participate in a research study to evaluate the handoff process used to transition patients from the Emergency Department (ED) to the Medical-Surgical (M/S) unit. You were selected to participate because you routinely are an active participant in the handoff process between the ED and inpatient units. The research procedure involves the completion of a 9 question electronic survey. The survey should take approximately 5-10 minutes to complete. Participation in the study is voluntary. There is no penalty for choosing not to participate. If you choose to participate, please complete the on-line survey via survey monkey. Completion of the survey implies consent to participate in the research study.

Survey responses will remain anonymous. Only aggregate responses will be shared. There are no direct benefits from participating in the study. However, the information gathered will help us to evaluate our current handoff process and make improvements if indicated.

If you have any comments, questions, or concerns regarding this research, please contact:
Tonya Johnson MSN, RN, CCRN, NEA-BC

If you have questions regarding your rights as a research participant, please contact:

irb@waldenu.edu

Appendix C: Transfer Report Communication Survey

Open Communication

1. I find it enjoyable to talk with other nurses from the sending/receiving unit?

strongly agree agree disagree strongly disagree

2. It is easy to ask advice from nurses on the sending/receiving unit?

strongly agree agree disagree strongly disagree

3. It is easy for me to talk openly with nurses in the sending/receiving unit?

strongly agree agree disagree strongly disagree

4. Communication between nurses in the Emergency Department and 6 Cathcart is very open?

strongly agree agree disagree strongly disagree

Quality of Information Exchanged

5. The accuracy of information exchanged between the Emergency Department and 6 Cathcart leaves much to be desired?

strongly agree agree disagree strongly disagree

6. I feel that certain nurses do not completely understand the information they receive?

strongly agree agree disagree strongly disagree

Shift Report

7. The report I receive adequately prepares me to care for my patient? (only 6CC answers this question)

strongly agree agree disagree strongly disagree

8. The report I give adequately prepares 6 Cathcart to care for the patient? (only the ED answers this question)

strongly agree agree disagree strongly disagree

9. It is often necessary for me to go back and check the accuracy of information?

strongly agree agree disagree strongly disagree

Curriculum Vitae

Tonya Johnson**Personal Statement**

A Doctor of Nursing Practice (DNP) student expected to graduate in January 2015 from Walden University. I have skill and knowledge in the application of evidence-based practice, systems thinking, interprofessional collaboration to improve practice and patient outcomes, and information technology to increase care coordination.

Education

2014 Walden University

Doctor of Nursing Practice– GPA 4.0

DNP Project: Examined the impact of implementing bedside report to transition patients from the Emergency department to the inpatient unit. The project applied Lewin's change model, specifically considering the unique challenges associated with across unit transitions while designing a standardized bedside report process. Patient and nurse satisfaction, and patient progression times were evaluated as outcomes of the project.

2009 Walden University

Master of Science in Nursing-Leadership and Management– GPA 4.0

Capstone Project: Provided recommendations for the redesign of the clinical advancement program at a large academic medical center. The work was evidence based and considered the competencies needed for the professional nurse now and in the future.

2005 Immaculata University

Bachelor of Science in Nursing– GPA 4.0

1993 Lancaster General Hospital School of Nursing

Diploma in Nursing– GPA 3.35

Honors in all nursing clinical practicums

Awards, Fellowships, Grants

AACN- \$10,000 CSI grant to design and implement an early mobility program for intubated patients in critical care

University of Pennsylvania Health System Quality Award for the design and implementation of a more efficient and patient centered approach to care delivery for the cardiac intervention patient population

Hubschman Award finalist for compassionate, patient-centered care

Work Experience

2013– Present Nursing Clinical Director- Emergency Department, Cardiology, Medicine, Patient Care Network Center

2011-2013 Nursing Clinical Director-Critical Care, ICCU, Neurology, Orthopedics, Oncology, Dialysis, Patient Services

Pennsylvania Hospital-University of Pennsylvania Health System

2009-2011 Nurse Manager Intermediate Intensive Care Unit

Pennsylvania Hospital-University of Pennsylvania Health System

2005-2009 Off-shift Nurse Manager Medical Surgical Intensive Care Unit

Lancaster General Hospital-Lancaster General Health System

2001-2005 Weekend Resource Pool RN Critical Care

Lancaster General Hospital-Lancaster General Health System