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## Evaluation of Nurse-to-Nurse Handoff With the Use of a Tablet

Maria Bessie Ziegenfuss  
*Walden University*

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# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Maria Bessie Ziegenfuss

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Walden University  
2020

Abstract

Evaluation of Nurse-to-Nurse Handoff With the Use of a Tablet

by

Maria Bessie Ziegenfuss

MS, Walden University, 2013

BS, Rutgers University, 1988

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

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February 2020

## Abstract

According to recent studies, many medical errors are caused by ineffective hand-off communication, which leads to patient harm and poor outcomes. Researchers have demonstrated that accurate and timely communication improves patient outcomes. The purpose of this quality improvement project was to evaluate the necessity, planning, implementation, outcomes, and transferability of the site quality improvement project, “Improving Nurse-to-Nurse Handoff With the Use of a Tablet.” The context/input/process/product model was used to provide a systematic approach to the evaluation of the site quality improvement project. A paired *t* test was used to analyze the pre- and post-survey results and demonstrated improvement in several parameters. Med/surge nurse perception of safety improved significantly in all four areas: received accurate report (+75.24%), patients arrive to unit in a timely manner (+16%), patient is admitted to the appropriate level of care (+28.7%), complete information (+68.24%), and opportunity to ask questions (+11.28%). There was no statistical significance in improvement of the Hospital Consumer Assessment of Healthcare Providers and Systems survey scores post project (September 2018– January 2019). The med/surg unit experienced a reduction of early rapid responses during the tablet project. The recommendation is to convert this quality improvement project into a research study and present the data for potential expansion of use of the tablet anywhere handoff occurs. The implication for positive social change is improved nurse-to-nurse handoff at the bedside, incorporating sending nurse, receiving nurse, and patient. The new process reduces medical errors, improves patient safety, and increases quality of care.

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## Dedication

This is dedicated to all the patients and families who trust us to provide safe quality care.

## Acknowledgments

Thank you to my husband who continually nagged me to push forward and complete my degree. Thank you to the mentors who inspired me throughout my career, especially my parents, who were both nurses.

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## Section 1: Nature of the Project

### **Introduction**

Ineffective hand-off communication is responsible for an estimated 80% of serious medical errors, including patient harm, delays in treatment, inappropriate treatment, and increased length of stay (Joint Commission Center for Transforming Healthcare, 2014). This DNP doctoral project was a quality improvement evaluation project determining the efficacy of using a tablet to perform nurse-to-nurse handoff. This project can contribute to positive social change by improving nurse-to-nurse handoff, reducing medical errors, and improving patient safety and quality of care.

### **Problem Statement**

At the practicum site, the rate of rapid responses and codes had increased, making this a patient safety concern. Patient satisfaction scores related to nurse communication have been a challenge for the organization. Nurses had a negative perception of safe handoff. A site quality improvement project to address these concerns has been implemented. An evaluation of the project is essential to determine efficacy and potential for wider scale implementation.

The previous state of nurse-to-nurse handoff from the emergency department (ED) to the in-patient units included a lengthy faxed situation, background, assessment and recommendation (SBAR) report with a 15-minute window for the receiving unit to call and ask clarifying questions. Transport was notified, and the patient was brought to the unit if no call was received during that window. Patients and caregivers were not actively involved in their care, negatively impacting patient satisfaction scores. The 15-

minute window was often not enough time to review the SBAR and speak to the sending nurse, causing frustration. Vital information was not communicated, potentially resulting in delays in care or unintentional harm to the patient.

The site quality improvement project objectives were to improve patient satisfaction scores related to nurse communication, improve patient safety, and improve nurse perception of safe handoff. Nurses perform hand-off communication in several scenarios throughout the day, and unintentional gaps or errors in information occur and lead to patient harm (Taylor, 2015). Skilled communication promotes a safer work environment, increased patient and family satisfaction, and a reduction in errors (Rogers, Li, Clements, Casperson & Sifri, 2017). It is expected that nurses will become skilled communicators, ensuring the information being shared is current and accurate.

### **Purpose**

Patients and families lacked participation in the hand-off process, causing dissatisfaction when vital information was not communicated. Important information that is not communicated between staff members can result in patients deteriorating, requiring transfer to a higher level of care. Levels of frustration climb as nurses question the accuracy of the report being given and the safety of the patient.

Nurse-to-nurse handoff with the use of a tablet was a quality improvement project that the study site implemented to reduce the gap-in-practice. The guiding practice-focused question for this doctoral project was as follows: Has nurse-to-nurse handoff with the use of a tablet improved patient safety, patient satisfaction scores, and nurse

perception of safe handoff? In this DNP project, I evaluated the site's planning, implementation, and outcomes of the quality improvement plan.

The targeted process was nurse-to-nurse handoff. The gap-in-practice was ineffective transfer of vital and accurate information in the previous process. The doctoral project addressed the gap through data analysis and synthesis to determine if the site project was successful. In this DNP project, I also give recommendations for revisions or implementation on a larger scale.

### **Nature of the Doctoral Project**

CINAHL, Medline, and ProQuest were used to perform a critical literature search and review to identify current practices and methods used for nurse-to-nurse handoff. Key words included *project evaluation, communication, handoff, nurse-to-nurse handoff, and bedside report*. Research evidence; clinical experience; reasoning; authority; quality improvement data; and the patient's situation, experience, and values are the foundation for quality improvement initiatives (Brown, 2005).

The site conducted a pre-project survey of the staff in the ED and med/surge unit, measuring nurse perception of the nurse-to-nurse hand-off process. The same survey was conducted 6 months after the start of the project. Patient satisfaction scores for the 3 months prior and 6 months after the start of the pilot were obtained from Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS). The rate of rapid response team interventions was obtained from the dashboard maintained by the critical care team and presented monthly to the Quality Improvement Committee for the 3 months prior to the project and 6 months after the project.

A core team was developed for the site quality improvement project. The team was composed of ED leadership, med/surg unit leadership, patient satisfaction, education, and the chief nursing officer. A separate team was developed to assist in data collection and analysis post project.

A post project survey of the staff was conducted as part of my evaluation project. Post project data related to rapid responses were compared to pre-project data to measure improvement. Pre-project patient satisfaction scores were compared to post project scores. Each outcome was addressed in the evaluation.

The purpose of this doctoral project was to evaluate the site's specific quality improvement project for its success in planning, implementation, and addressing the gap-in-practice. Success is defined by the data collection and analysis as it relates to the three variables: patient satisfaction, rapid response rates and nurses' perception of accuracy, and safety of nurse-to-nurse handoff.

### **Significance**

The stakeholders that may be potentially impacted by addressing the local problem include patients and families, healthcare providers, the local institution, and the corporate hospital system. The potential contributions to nursing practice are improved quality of care through safer transition, improved patient satisfaction related to increased nurse communication, and improved nurse perception of safe handoff. There is a high potential for transferability of nurse-to-nurse handoff with the use of a tablet anywhere transition of care occurs. If the project is deemed to have accomplished the goals, it can be implemented throughout the organization as well as anywhere changes in provider

occurs. The potential implication for positive social change is improved nurse-to-nurse handoff at the bedside, incorporating sending nurse, receiving nurse, and patient. The new process may reduce medical errors, increase patient safety, and increase quality of care.

### **Summary**

The previous state of nurse-to-nurse handoff was hurried and incomplete and lacked patient inclusion. This can lead to patient harm. The study site has implemented a quality improvement plan to improve the safety and quality of care for their patients. This doctoral project was a quality improvement evaluation project that addressed the site-specific project for success and implementation on a wider scale.

## Section 2: Background and Context

### **Introduction**

The previous process for nurse-to-nurse handoff did not actively involve patients or families, potentially causing gaps in information that could lead to delay in care and potential errors in treatment. The Joint Commission's 2009 and 2010 National Patient Safety Goals included the requirement to encourage patients to be actively involved in their care and to implement a standardized handoff communication process when a change of care providers occurs (Joint Commission, 2012). The hospital of the study site had completed a quality improvement project involving the use of a tablet to address the Joint Commission's recommendations of standardization and patient and/or family participation in nurse-to-nurse handoff.

In this DNP project, I used key concepts, models, and theories to provide an organized systematic approach in analyzing the planning, implementation, and results of the change. In this section, I discuss the project's relevance to nurse practice and describe the context and background. The role of the DNP student and project team are also included in the discussion. In addition, I make recommendations for further implementation and sustainability.

### **Concepts, Models, and Theories**

A model or framework that guides translation of research into practice must include change process, variables impacting change, and the feasibility of implementing change within a culture (White & Dudley-Brown, 2012). The Johns Hopkins nursing evidence-based practice (JHNEBP) model was used to facilitate the adoption of new



approaches to practice. The goal of the JHNEBP model is to incorporate the most current research findings and best practices into daily patient care. Practice, education, and research are the cornerstones of the JHNEBP model, and these cornerstones are influenced by several internal and external factors that affect the ability to implement change (Buchko & Robinson, 2012).

The JHNEBP model provided the site an organized approach to the planning and implementation of nurse-to-nurse handoff with the use of a tablet at the patient's bedside. Each cornerstone was addressed throughout the project. I conducted a literature review of nurse-to-nurse handoff and determined best practices. Current practice of nurse-to-nurse handoff was discussed at the site project team meetings. Gaps in current practice were identified by the team. Front-line staff in collaboration with the project team developed a new process for handoff using the tablet, addressing the variables and goals of the project. Education of staff was planned and implemented, taking into consideration internal and external influences.

The JHNEBP model also acknowledges the internal and external influences that affect change. Culture, environment, equipment, and staffing are examples of internal factors that must be taken into consideration when planning any project. Each of the representatives from the units collectively developed a plan to overcome these internal factors, such as volume, staffing and acuity, and knowledge. External factors, regulatory agencies (Joint Commission and Center for Medicare and Medicaid), and core measures impact practice and must be taken into strong consideration when developing policies and procedures.

Evaluation is an essential component of a quality improvement plan. It is the responsibility of the project leader to develop a strong evaluation plan that fits the unique properties of the improvement project and data to be collected and selects the appropriate models and tools (Zaccagnini & White, 2011). The model chosen to evaluate the site quality improvement project was the context/input/process/product (CIPP) model. The CIPP model, developed by Stufflebeam and colleagues, provides a systematic approach to the evaluation of an improvement project for quality and value considering multiple factors (Lippe & Carter, 2018). The four complimentary evaluations are context evaluation, input evaluation, process evaluation, and product evaluation (Frye & Hemmer, 2012).

The site quality improvement project was evaluated according to how each step of the CIPP model was met. Examples of questions included the following: Is there evidence to support the need for the quality improvement? How was the need determined? Is there evidence to promote the change in practice? How was the program implemented? Is there evidence of formative evaluation during this phase? Were the outcomes identified met? Can the project be expanded to a wider scope?

### **Relevance to Nursing Practice**

Improving the quality of nurse-to-nurse handoff has important implications to nursing practice. The process of handoff can have a significant effect on nursing care (Ernst, McComb, & Ley, 2018). Nurses perform some variation of hand-off report multiple times a shift. Patients transfer from unit to unit and leave for procedures that may require changes in condition to be communicated.

The quality of the report can differ from nurse to nurse, unit to unit, and shift to shift. This variation can contribute to avoidable medical errors that can lead to patient harm. Bedside nurse-to-nurse handoff enables patients to contribute to the report and nurses to visualize the patient, thereby promoting patient safety (Derby, Wroblewski, & Foss, 2012)

Multiple interruptions during handoff of ED patients along with the high stress and fast pace are a grave concern due to a high potential for missed critical patient and family information (Murray, McGrath, & Smith, 2013). The former state of nurse-to-nurse handoff was a faxed SBAR to the receiving unit. The receiving nurse had 15 minutes to review and call with questions; otherwise the patient was transported without any verbal communication between nurses. Patients and families were not part of the standard process.

In this doctoral project, I evaluated a site quality improvement process that addressed deficiencies in nurse-to-nurse handoff revealed by observation and the nurse presurvey. Variations that contribute to errors are addressed by developing a standardized process for report. Bedside handoff is taken to an elevated level, involving the use of technology to facilitate the face-to-face bedside report with the use of a tablet. The receiving nurse can validate information and involve the patient and family in the nurse-to-nurse handoff. The success of this quality improvement process can directly impact nursing practice and may improve safety and quality of patient care through the reduction of errors.

### **Local Background and Context**

The practice setting is a 150-bed Joint Commission accredited, Pathways Designated community hospital. The hospital is one of five hospitals in one of the state's largest hospital systems. The nurse-to-nurse handoff with the use of a tablet project took place between the ED and the med/surge unit. The ED is a 29-bed unit with an annual volume in 2017 of 36,000.

One third of the ED visits are admitted to the hospital. One third of the total admissions are admitted to the med/surge unit. The med/surge unit has 69 beds. The tablet was used to give a bedside SBAR report on all admissions from the ED admitted to the med/surge unit. Verbal consent from the patient and/or family was obtained prior to a Skype connection with the receiving unit. Calls were not recorded.

The Centers for Medicare & Medicaid Services reimburses hospitals based on scores from the HCAHPS measuring patient experience in 27 categories, including nurse communication (Letourneau, 2016). Nurse communication scores are a challenge for this hospital and is one of the variables the site quality improvement project includes. Hospitals must develop strategies to maximize reimbursement.

The hospital has embarked on a journey to becoming a high reliability organization. Hospitals seeking to become a high reliability organization report safety culture metrics alongside strategic planning and patient satisfaction (Chassin, & Loeb, 2013). The hospital had seen an increase in rapid response team (RRT) calls as evidenced by data reported to the Quality Improvement Committee. The receiving unit perceived the faxing process to be a major contributor to the increase.

Information received in the faxed report was at times inaccurate or not current, causing frustration for the receiving nurse and jeopardizing patient safety. The sending nurse was often too busy to clarify information stating, “It’s all in the fax.” This prompted a preproject survey of nurses working in the ED and med/surge units prior to the start of the site project. The survey was developed and distributed by the core team of the site quality improvement project.

The site has a shared governance model that includes a quality committee who monitors outcomes, a practice committee who develops policies and procedures, and an education committee who implements changes. A shared governance structure supports and sustains evidence-based practice through the committees incorporated in the structure by providing an avenue to research new and innovative practices, plan and implement change, and measure quality outcomes (Fisher & Hubbard, 2015). Formal policies, procedures, and education for the use of the tablet in nurse-to-nurse handoff will be developed at the completion of the pilot project, following the shared governance model.

It is essential to know who impacts change within an organization to facilitate change. The chief nursing officer (CNO) is the highest-ranking nurse within an organization and plays an integral role in the strategic planning and decision making within the organization (Roussel, 2013). Evidence to support the need for change, an overview of the project, and the financial impact was presented to the CNO to gain support for the site project. The CNO recommended approaching the hospital foundation for financial support.

The initial quality improvement project was presented to the hospital foundation at the monthly meeting to obtain funding. The foundation is comprised of the senior leadership team of the hospital, community members, and local business owners. The hospital foundation fund raises and provides grants and funding for projects throughout the hospital that promote safety and quality of care. Specific funds pertaining to patient experience were used to purchase the tablets for the designated areas. The foundation's expectation was to be kept informed of the progress of the project.

A core team met to plan and implement the tablet project. The JHNEBP model was used to guide the project. The role of the core team was to identify gaps in practice and potential barriers and to plan and implement the quality improvement project on a small scale. Each team member had a responsibility to actively participate in the discussions and complete certain assignments by the due dates. Assignment included revision of process maps, ordering equipment, collecting supporting data, and developing surveys. I discuss specific details in a later section.

### **Role of the DNP Student**

I have been the manager for the site's 69-bed med/surg unit since October of 2017. I have spent most of my 30-year career in critical care, emergency and leadership and management. This opportunity has enabled me to enhance my leadership skills. This experience has enlightened me to the challenges imposed upon nurses in the med/surge specialty and safety risks that our patients are subjected to on a moment-to-moment basis and caused me to become passionate about the site quality improvement project and my DNP evaluation project.

The continuously changing healthcare landscape provides the perfect opportunity for professional, organizational and individual growth through networking, partnering and collaboration (Grossman & Valiga, 2009). Advanced practice nursing prepares transformational leaders to meet the future needs of the complex health care delivery system balancing productivity, safety and quality of care (Zaccagnini & White, 2011). My role as a DNP student was to lead the evaluation of the site quality improvement project of nurse-to-nurse handoff with the use of a tablet. The responsibilities of this role included assembling an evaluation team, facilitation of collaboration and partnering and analysis and synthesis of outcomes. An essential part of the DNP role is to disseminate the outcomes of the evaluation project to improve nursing practice and promote safety and quality of care.

### **Role of the Project Team**

The DNP project was the evaluation of the site tablet project. Decisions about quality of clinical outcomes and performance improvement will be more readily implemented as front-line nurses transform into leaders and own the responsibility rather than the manager (Grossman & Valiga, 2009). A new team to evaluate this quality improvement project consisted of front-line staff, educators, quality improvement committee members and administrative assistance. The CIPP (context/input/process/product) model guided the project evaluation.

All members of the team were educated on the steps of evaluation using the CIPP model. Each member of the team had an opportunity to share information. An agenda was prepared ahead of time and distributed to the members for the members to come

prepared to actively participate in the discussion. Information that is share was supported by evidence-based research.

Promoting collaboration amongst multidisciplinary teams implies trust and understanding between the participants (Kelly, 2011). The timeline and responsibilities of team members to review and provide feedback was discussed at each meeting and documented in the minutes. This promoted accountability for tasks. A template for reporting progress was used at meetings to minimize distraction and keep the flow of the meeting moving in the right direction.

A post survey of the staff was conducted. Post-project data related to rapid responses was compared to pre-project data to measure improvement. Each outcome was addressed in the evaluation. The project evaluation took place after six months of implementation of the site quality improvement project.

### **Summary**

Nurse-to-nurse handoff with the use of a tablet at the patient's bedside connected the gap-in-practice enabling patient and families the opportunity to contribute potentially vital information during report. This process allowed nurses to validate and verify information received reducing potential errors, delays in treatment and patient harm. The first step in planning a quality improvement project is to identify an opportunity for change. Collecting and reviewing evidence to support the need for the change do this. An organized and systematic approach is essential to the success of quality improvement projects.



### Section 3: Collection and Analysis of Evidence

#### **Introduction**

Serious medical errors including patient harm, delays in treatment, inappropriate treatment, and increased length of stay have been attributed to ineffective communication (Joint Commission Center for Transforming Healthcare, 2014). The site's quality improvement (QI) project, Improving Nurse-to-Nurse Handoff With the Use of a Tablet, was developed to address the gaps in practice and improve patient satisfaction, quality, and safety. The purpose of this DNP project was to evaluate the site's quality improvement project for success in achieving the goals and transferability in other areas where nurse-to-nurse handoff is performed.

#### **Practice-Focused Question**

The practice-focused question was as follows: Has nurse-to-nurse handoff with the use of a tablet improved patient safety, patient satisfaction scores, and nurse perception of safe handoff? The local problem is that HCAHPS patient satisfaction scores have been a struggle for the site. Low scores directly impact reimbursement. Nurses directly impact patient experience and satisfaction on the frontlines through empathy and effective communication (Heath, 2017). The rate of RRT activations had also increased as patients were admitted to the wrong level of care and urgently transferred. There was a disconnect between the ED nurses' perception of the quality of report being given and the receiving unit's nurses. This caused increased frustration and job dissatisfaction. The purpose of this DNP project was to evaluate the site quality improvement project's

process of planning, implementation, and level of success in attaining goals and the ability to implement the project on a larger scale with the use of the CIPP model.

### **Sources of Evidence**

Clearly defining the problem facilitates identification of the sources of evidence. Sources of evidence included a literature review, surveys and data collection, and analysis. The practice-focused question for this project was as follows: Has nurse-to-nurse handoff with the use of a tablet improved patient safety, patient satisfaction scores, and nurse perception of safe handoff?

The literature review provided the support for the project. Topics the literature review covered included tools for communicating handoff, provider perception of the effectiveness of handoff, and recent improvements made to nurse-to-nurse handoff. Included in the literature review was research on evaluation projects, models, and tools. It validated the gap in practice identified in the site quality improvement project.

### **Published Outcomes and Research**

The site team conducted a critical literature search using CINAHL, Medline, and ProQuest to identify current practices and methods used for nurse-to-nurse handoff. Key words included *communication*, *handoff*, *nurse-to-nurse handoff*, and *bedside report*. Using all resources such as the hospital librarian also enhanced the literature search.

The literature search on nurse-to-nurse handoff was performed focusing on tools for handoff, perceptions of effectiveness of handoff, and improvements made to handoff. The purpose of the literature search as part of the DNP project is to validate support for the site's QI project and review best practices. A literature search provided information

on evaluation projects. The scope of the review was within the past 7 years. The types of literature included textbooks and scholarly articles published in professional journals.

### **Archival and Operational Data**

The HCAHPS survey was a source of evidence that assisted in determining the need for the site QI project, using the scores in the nurse communication domain. The site used the two quarters prior to the QI project implementation to support the need for the project. The 3-month HCACPS scores postimplementation were obtained with site approval to measure the outcome.

The RRT dashboard was obtained with site approval for the first two quarters. Data are collected manually by the intensive care unit educator and reported to the hospital wide Quality Committee monthly. The information is displayed on a line graph for each month and is presented at the corporate quality meeting. The line graph is an analytical tool that can display changes because of interventions (Terry, 2015). Fluctuations in the data identified quality improvement opportunities. The dashboard for the one-quarter post project was obtained from the site by the evaluation team by performing a comparison to the data collected post project implementation.

### **Evidence Generated for the Doctoral Project**

The core team developed a preproject nurse survey for the ED and the med/surg staff. All nurses working in the ED and med/surg units were surveyed prior to the start of the project. The survey measured nursing perceptions of the current nurse-to-nurse handoff. The same survey was distributed 3 months after the start of the project. The evaluation team measured the post project results against the preproject results to

determine improvement. The preproject survey was performed in an online platform and was distributed to the nursing staff in the ED and med/surge units via e-mail by the nursing education department.

Participants of the survey were anonymous. No identifying features were asked in the surveys. The online survey platform also provided the analysis of the preproject survey and the analysis of the post project survey. The primary nurse prior to connecting to the receiving nurse used an additional online platform to obtain verbal consent for the tablet report.

The project leader and unit managers chose the core team for their leadership roles on the units. A representative from the Information Systems Department was chosen by the department manager based on availability and expertise on the use of the tablet. The manager for the Patient Satisfaction Department was chosen to assist in the collection of the HCAHPS and knowledge of the survey. The CNO was the executive driver for the site project.

It was essential that the subsequent evaluation team be composed of members from front-line staff, quality, patient experience, education, and leadership. Voluntary participation was recommended. Frontline staff experienced in using the process was able to provide valuable feedback. The Walden University Office of Research Ethics and Compliance in collaboration with the Institutional Review Board ensures that all doctoral capstone projects meet university ethical standards of protecting human subjects, creating ethical partnerships, and using scholarly tools (Walden University, 2018).

### **Analysis and Synthesis**

Online software was used to track, organize, and analyze the pre- and post-nursing surveys. An Excel spread sheet was used to collect the data on RRT calls. The evaluation team obtained the statistics on RRTs for 3 months prior to the start of the project and 3 months post project, with permission from the site. The HCAHPS report is published by the hospital system on the hospital intranet website weekly. Three months of preproject data and 3 months of post project data were obtained with site approval for comparison.

Both units developed an audit tool to track each episode and document barriers and comments. The same tool was used on each unit to promote interrater reliability. The evaluation team obtained the audits with permission from the site to identify trends and solutions. The evaluation team collected all the data and presented the information using graphs to facilitate comparison. A paired *t*-test technique was used to analyze and synthesize the data. Paired *t*-test analysis is the appropriate test to use when comparing pretest and posttest measurements (Grove, Burns, & Gray, 2013).

### **Summary**

Analysis and synthesis of data determine the success or failure of a quality improvement project. The data were used to assess if the objectives of the quality improvement project were met. Wide scale implementation of quality improvement projects was determined by its success. A detailed explanation of the findings and recommendations is discussed in the following section.

## Section 4: Findings and Recommendations

### **Introduction**

“Nurse-to-Nurse Handoff With the Use of a Tablet” was a QI project that the site developed to improve the quality of care and safety of their patients. The purpose of this doctoral project was to systematically evaluate the site quality improvement project using the CIPP model. The guiding practice question was as follows: Has nurse-to-nurse handoff with the use of a tablet improved patient safety, patient satisfaction scores, and nurse perception of safe handoff?

The sources of evidence included the literature search and review of evaluation projects, models and tools for handoff, surveys, team meetings, and dashboards. A paired *t*-test technique was used to analyze and synthesize the data. Data are presented in the form of graphs.

Objectives are measurable concrete statements that can be used to establish priorities (Roussel, 2013). The objectives of the site project were to improve quality and safety by reducing the number of RRTs on the unit, improve nurse communication scores, and improve nurse perception of safe handoff. In this section, I examine the findings, display and interpret the data, and discuss the limitations and implications for potential positive social change.

### **Findings and Implications**

The CIPP evaluation model checklist developed by Stufflebeam (2007) assisted in organizing the findings and implications of the DNP quality improvement evaluation project. The acronym stands for context/input/process and product evaluation and

translates into four primary questions: What needs to be done? How should it be done? Is it being done? Did it succeed? In the following section, I answer each question as it related to the site quality improvement project.

The preproject process for handoff of patients admitted from the ED did not allow ample time for the receiving nurse to review the faxed record and ask clarifying questions. The nurses often perceived the information to be inaccurate, incomplete, and not current. Patients arrived on the unit requiring immediate intervention and transfer to a higher level of care. Patient safety and satisfaction deteriorated. Nurses became increasingly anxious and frustrated when they were receiving patients from the ED. The ED nurses became defensive when questioned. Family participation did not exist. This process was in much need of revision.

In May of 2018, funding for the project was obtained, and equipment was ordered. Monthly team meetings began in June. A training video was filmed at the end of July, and the survey of the staff was completed. Education of staff occurred in the month of August. The site QI project implementation began in September of 2018. The three goals of the project were to improve nurse communication scores, reduce the number of rapid responses at the 8 and 12-hour time from admission to the unit, and improve nurse perception of safe handoff.

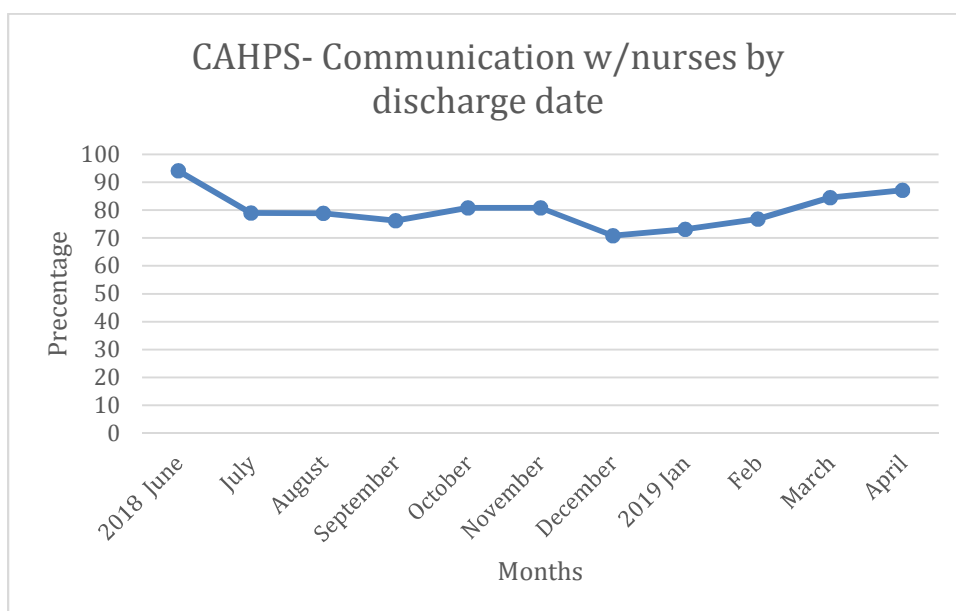
Factors that can cause barriers to change include decreased resources, lack of support, poor communication, and pressure to complete daily tasks (Grossman & Valiga, 2017). The implications of competing priorities during education and implementation reduced compliance with the use of the tablet in nurse-to-nurse handoff. Nurse

communication did not improve because of increased frustration with learning too many things at the same time. The site priority was electronic medical record (EMR) training. Leadership and staff were challenged with meeting a specific deadline for all staff to be trained. The tablet project would suffer the consequences of this lack of participation. One of the most frequent reasons for not using the tablet for report was “too busy.” The new process was not being followed consistently.

The site’s intention was to implement the project in July of 2018. Implementation was delayed for several reasons. Parts of the equipment needed were backordered. Once they arrived, the information technology department had issues with connectivity and approval for use of necessary proprietary internet platforms.

The next step was to develop the education and training plan. Filming the training video was delayed due to availability of the cameraman. The site go-live for the new EMR was moved up to October from the planned November date with short notice. This left a 1-month gap between tablet and EMR go-lives. Staff training on the new EMR was happening simultaneously with the tablet training. This was stressful to staff and leadership. *Figure 1* displays nurse communication scores by discharge date. The findings show minimal improvement in scores during the project time frame (September 2018– January 2019).





*Figure 1.* Nurse communication HCAHP scores.

*Figure 2* shows that the actual number of RRTs increased post project. There were 40 RRTs from June to October and 66 from November to March. *Figure 3* shows that 18% of the RRTs occurred in the first 8 hours of admission and 2% after 12 hours. The percentage of RRTs after 8 hours decreased to 4% and after 12 hours increased to 6% despite the increase in the number of RRTs after the project started, see *Figure 4*. Rapid deterioration of a patient's condition upon arrival to the unit can be a result of incorrect placement. Poor quality of information can also contribute to patients being admitted to the wrong level of care. The med/surg unit experienced a reduction of early rapid responses during the tablet project.

It was difficult to determine if the reduction was related to the use of the tablet or the implementation of the EMR. The new EMR allowed the nurses to see what

interventions were done in the ED. The previous ED record did not crossover to the inpatient record and the nurses relied on the faxed SBAR.

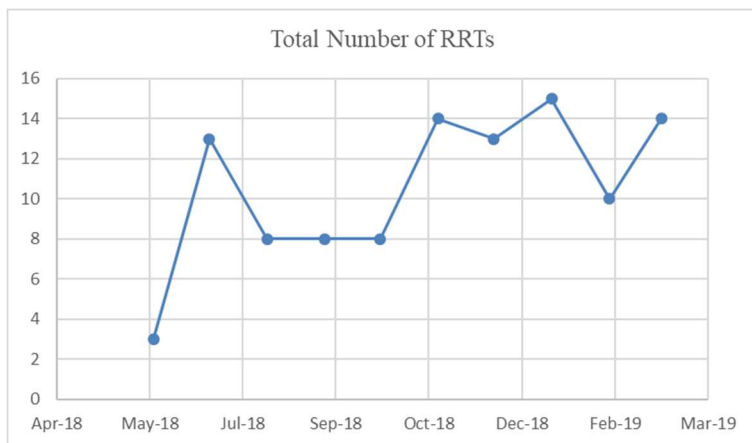


Figure 2. Rapid response calls.

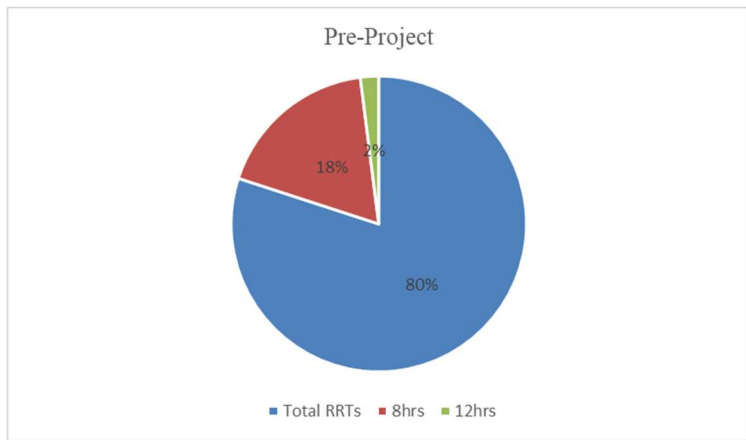
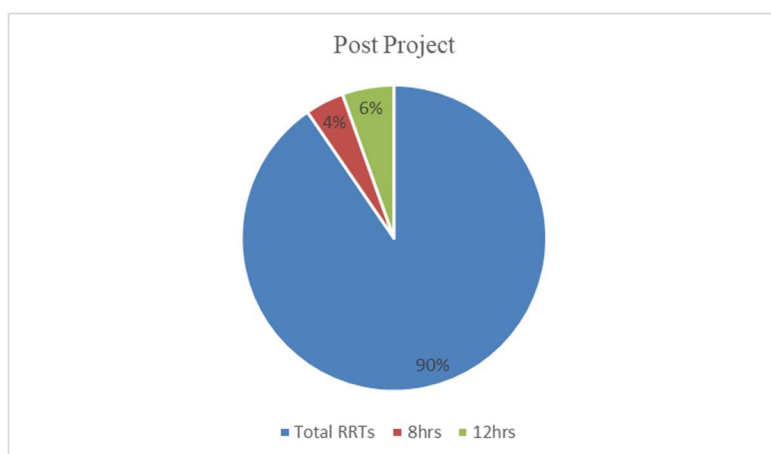


Figure 3. Preproject percentage of RRTs at 8 hours and 12 hours from arrival to the floor.



*Figure 4.* Post project percentage of RRTs at 8 hours and 12 hours from arrival to the floor.

*Figure 5* reports the outcomes of the pre- and post-project survey on four areas of nurse perception of quality and safety of communication. Nurse perception of safety improved significantly in all four areas: (a) received accurate report (+75.24%), (b) patients arrive to unit in a timely manner (+16%), (c) patient is admitted to the appropriate level of care (+28.7%), (d) complete information (+68.24%), and (e) opportunity to ask questions (+11.28%).

The ED staff has had a high turnover, and the response rate on the post project survey was extremely low due to lack of staff who participated. The initial response rate was 30%. The post project response rate for the ED was 16%. The data were not statistically significant to report due to the lack of participation and staff who participated in the project.

The response rate on the med-surg unit was 58%. This unit experienced less turnover and a more engaged team. The improvements on the med/surg unit can be

attributed to the new EMR and the improved quality of the information being documented. This enables the receiving nurse to ask appropriate clarifying questions based on the medical record. Visualizing the patient prior to arrival to the unit reduced the number of surprises. Nurses were able to request a reassessment by the admitting physician when there were concerns.



Figure 5. M/S pre- and post-project survey score.

The volume in the ED was above budget. They were challenged with several leaves of absence and vacancies during this time. The med/surg unit also experienced a spike in census as the flu season began early and the ED volume was up. Staffing was also a challenge for the second floor with staff supporting the EMR implementation; leaves of absence and vacancies. Morale on both units was low and stress levels high. The leadership drivers of the QI project were occupied with the larger EMR implementation project and unable to promote the QI project with the level of

commitment needed to be successful. Despite the number of meetings to revise and revamp the implementation, the project died within three months and did not have the desired outcomes.

The plan was to try the QI project again three months after the EMR go-live. The organization underwent a leadership change. The original Chief Nursing Officer (CNO) who played a major role in executive support of the project left the system. The new CNO was assigned two sites in the system. A new director of nursing position was developed. The patient experience manager transferred to another site. People on the original core team were no longer part of the organization. Re-implementation of the QI project was postponed. Evaluation of the QI project fell on the front-line staff and members of the research council.

The concept of using the tablet did not go unnoticed. The site post-acute care coordinator heard about the tablet project and asked if the team would consider working with one of the nursing home facilities to use the tablet for all discharges from the med/surg unit to the facility since the ED implementation was not going well. The coordinator met with the director of nursing and assistant director at the selected nursing home to present the tablet project. The nursing home leadership was excited to implement this innovative project. The nursing home's goals were to reduce 30-day re-admission rate and improve nurse to nurse handoff. They were able to reduce re-admission rate by 35%. The coordinator attributes the reduction in re-admission rate to the new nursing leadership at the facility and the tablet project. They have not determined impact on nurse-to-nurse handoff.

The major implication from the project is change cannot be successful without leadership support, an environment conducive for change and active participation by all parties. People cannot manage too many changes at one time and expect to be successful. Patients and families were not able to experience the full breath of the project due to inconsistency of use between the ED and the med/surg unit. Commitment to the project by all stakeholders is essential to successful implementation, data collection and evaluation of outcomes.

The potential implication to positive social change is the new standard for nurse-to-nurse handoff with the use of a tablet. Active patient involvement in handoff can improve the quality of information communicated. Expansion to other disciplines beyond nursing to improve quality, safety and high reliability would also be a potential implication to positive social change.

### **Recommendations**

The site is part of a large healthcare system. The health system is committed to keeping up with the rapidly changing healthcare environment. One of the ways that a system can do this is through innovation. The system empowers employees to submit innovative solutions to healthcare problems. Nurse-to-nurse handoff with the use of a tablet was initially submitted and was not selected as a system initiative. The site attempted to implement it as quality improvement project that was not successful.

The recommended solution to address the gap-in-practice as informed by the findings is to convert the QI project into a formal research study. The site director of nursing (DON) attended a system shared governance meeting and this project was again

submitted requesting support for better implementation. The DON returned from the meeting asking that this project be implemented as a research project following the proper protocol for system research projects. The ED manager and med/surg manager have been tasked with advancing the quality improvement project to a research project following the research study system guidelines.

The DNP project was an evaluation of the quality improvement project. A stronger commitment from managerial leadership, senior leadership and front-line staff is strongly recommended to move this study forward. Guidance from the system nurse researcher is also recommended to facilitate the IRB application and research process. She would also be a great resource during the data collection and analysis phases.

A review of the process maps (Appendix B and C) and standard work (Appendix A) used in the initial quality improvement project is suggested as part of the research project and should be used in the research pilot. The review and revision should be completed by front-line team working in the ED and med/surg units. It is also recommended that the training video be reviewed and revised by the front-line team due to the EMR implementation that was not completed in the initial training video.

### **Contribution of the Doctoral Project Team**

The intent was to enhance the core team with frontline staff that was involved in the use of the tablet to obtain feedback and evaluate the project. A less formal approach was taken in formulating the project team due to the numerous changes that had transpired. Feedback was obtained through interviews with staff that participated in the project. Med/surg clerical assistance and unit-based educators from the ICU and

med/surge unit were recruited to collect and organize the data. The administrative assistant to the director of nursing assisted in developing the survey and distributing it to the staff on the med/surg unit and ED. Meetings with the Chief Nursing Officer and the Director of Nursing were held to discuss the barriers to successful implementation and recommendations moving forward.

Nursing leadership recommended that the originators of the project be contacted to obtain information on how they implemented the project and obtained support from the participants. Their leadership strongly supported the use of the tablet for all admission handoffs. Patients do not leave the ED without it. It became part of the admission process.

A new med/surg clinical specialist has also been hired for a sister hospital. This is another asset to moving this project forward. Key members of the evaluation team met with her and her recommendation is in line with leadership to move forward and implement this project as a research project instead of a quality improvement project.

### **Strengths and Limitations of the Project**

The strength of the project is the promotion of safety and quality care of patients. The driving force behind the project is to promote high reliability and “zero harm.” Using technology to accomplish this is innovative and exciting.

The tablet project has already expanded to nurse-to-nurse handoff with sub-acute transfers from the med/surg unit. Evaluation of that project is soon. Currently it is one floor in one facility. The goal is to expand it to more floors at that facility as well as within the site.



There were several limitations of the project. There was not a significant reduction in RRTs. There are several variables that could influence RRTs. Appropriate placement of patients is influenced by the provider, bed availability, review by the charge nurse and receiving nurse. This makes it difficult to isolate the use of the tablet as the reason for reduction in RRTs. Poor participation in the post project survey reduces the n and makes it difficult to generalize the results. The lack of participation from the ED regarding the post project survey is another limitation when discussing improved perception of safety. Using the HCAHPs scores to measure patient satisfaction does not isolate the use of the tablet as the reason for improved scores.

## Section 5: Dissemination Plan

The purposes of dissemination are to share the results with stakeholders and the professional community and the potential for transferability outside of the current setting (Zaccagnini & White, 2011). The plan for dissemination is to first present the results to the organization's researcher to review the outcomes and obtain assistance with determining the appropriate audiences and method of presentation. A presentation to the units involved with the project at a staff meeting in the form of a PowerPoint would be beneficial. Feedback is important when planning to do a research project.

The hospital foundation that supported the project will receive a presentation at one of their monthly meetings through an oral presentation, demonstration, and PowerPoint. The DNP project outcomes will be presented to the site research council at a monthly meeting. The abstract will be submitted to the system research council for approval to do a poster presentation at the next research day. The abstract will also be submitted to the Academy of Medical Surgical Nurses for approval to present at the national conference in the form of a podium or poster presentation.

There have been recent events that have occurred that potentially could have been avoided with the use of the tablet. The plan is to reeducate and revitalize the project with more leadership support and involvement with the quality department. Dissemination will go through the research and practice councils. The education council will support education of staff.

Handoff occurs every time a patient has a procedure, moves to another unit or facility, or changes providers. These events occur several times a day or even an hour.

This project goes beyond nurse-to-nurse. Patients, families, caregivers, and administrators would all be appropriate for this project.

There is potential for error any time that information is passed on. Using a tablet to validate information through visualization can improve safety and quality. The venues for this project can reach outside the walls of the hospital to interfacility transfers and prehospital situations.

### **Analysis of Self**

My role as a practitioner has grown during my journey to attain my doctorate in nursing practice. I began my journey as an off-shift manager in an academic hospital. Professional growth, development, and higher education surrounded me. It was a four-time Magnet designated facility. Pursuing my doctorate was the natural progression in my desire to one day become a CNO.

My role as a scholar has been more challenging as my role as a practitioner changed several times during my journey. I transferred to another campus and into a new position halfway through my first year in the DNP program. It had been 10 years since I had my own unit, and I wanted to succeed. I contemplated quitting to immerse myself in my new position as the ED manager.

Being a scholar is not about me. It is about assisting others to achieve their goals. It was a privilege mentoring five students pursuing higher degrees in the last 2 years and to be asked to mentor three students soon pursuing their DNP. It seems to be much easier to help others get through their projects than to do my own. My long-term goal is to give back to my profession by becoming a professor in nursing.

I have learned so much about project management not only from my own experience but also through helping others complete their capstones. I purposefully chose a person who was an expert in project management when I was completing my capstone for my master's in nursing to learn all I can. I continue to struggle with balancing project management and my other responsibilities.

This doctoral project was a lesson in passion and determination. One of my professors said, "Pick something that you are passionate about because it will take commitment." I should have listened. I started a DNP project that I had to abort after 2 years. I was not passionate about wound care at the time. It was discouraging when I had to start all over again but once again the words of encouragement from friends, family, colleagues, and my professor pushed me forward.

The tablet project is something that I am passionate about. It is exciting and innovative and promotes safe quality practice. Sometimes personal passion is not enough. Engaging other people and attempting to elicit the same passion in them can be challenging. It is also important to share what you are doing with influential people. Having a team of people providing strong support is essential to a successful project.

To be successful in assembling a determined and passionate team to complete a project that will have an impact on social change and a clear mission and vision needs to be developed and shared. People who are not committed to the mission and vision can prevent the successes from happening. Leaders must be able to strategize and realize when plans need to be adjusted and to surround themselves with a diverse team of effective followers (Grossman & Valiga, 2017).

Choosing a quality improvement evaluation project has enabled me to identify opportunities to make changes that would benefit implementation. There is also a lot to learn when things do not go exactly the way they are planned. This experience has taught me to look at other alternatives to obtain the outcomes needed and has made me a stronger leader.

### **Summary**

The doctoral project is an opportunity to combine everything that is learned throughout the journey and make a difference in society. It validates the importance of our role as a leader and change agent. The project reminds us why we chose to become nurses. It is a testament to our passion for caring and determination to improve the quality and safety of care we deliver.

## References

- Buchko, B. L., & Robinson, L. E. (2012). An evidence-based approach to decrease early post-operative urinary retention following urogynecologic surgery. *Urologic Nursing, 32*(5), 260-264, 273.
- Chassin, M. R., & Loeb, J. M. (2013). High-reliability health care: getting there from here. *The Milbank quarterly, 91*(3), 459–490. doi:10.1111/1468-0009.12023
- Ernst, K. M., McComb, S. A., & Ley, C. (2018) Nurse - to - nurse shift handoffs on medical–surgical units: A process within the flow of nursing care. *Journal of Clinical Nursing, 27*, 1189–1201.
- Fisher, C. A., & Hubbard, M. L. (2015). Evidence-based nursing. Extending evidence through shared governance. *Nursing Management, 46*(7), 16-18 3p. doi:10.1097/01.NUMA.0C)00465405.30709.ec
- Frye, A. W., & Hemmer, P. A. (2012) Program evaluation models and related theories: AMEE guide, 67. *Medical Teacher, 34*, 288-289. <http://dx.doi.org/10.3109/0142159x.2012.668637>
- Grossman, S. C., & Valiga, T. M. (2017). *The new leadership challenge: Creating the future of nursing* (5<sup>th</sup> ed.) Philadelphia, PA: F.A. Davis Company
- Grove, S. K., Burns, N., & Gray, J. R. (2013). *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (7<sup>th</sup> ed.). St. Louis, MO: Saunders Elsevier.
- Heath, S. (2017). Improving nurse communication with a 56-second strategy. Retrieved from: <https://patientengagementhit.com/news/improving-nurse-communication->

with-a-56-second-strategy

- Joint Commission. (2012). National public safety goals. Retrieved from: [http://www.jointcommission.org/standards\\_information/npsgs.aspx](http://www.jointcommission.org/standards_information/npsgs.aspx)
- Joint Commission Center for Transforming Healthcare. (2014). Improving transitions of care: Hand-off communications. Retrieved from [http://www.centerfortransforminghealthcare.org/assets/4/6/handoff\\_comm\\_storyboard.pdf](http://www.centerfortransforminghealthcare.org/assets/4/6/handoff_comm_storyboard.pdf)
- Kelly, D. L. (2011). *Applying quality management in healthcare: A systems Approach* (3<sup>rd</sup> ed.). Chicago, IL: Health Administration Press
- Lippe, M., & Carter, P. (2018). Using the CIPP model to assess nursing education program quality and merit. *Teaching and Learning in Nursing, 13* (2018), 9–13. <https://doi.org/10.1016/j.teln.2017.09.008>
- Letourneau, R. (2016). *Better HCAHPS scores protect revenue*. Retrieved from <http://www.healthleadersmedia.com/finance/better-hcahps-scores-protect-revenue>
- Rogers, J. (2017). Can We Talk? The Bedside Report Project. *Critical Care Nurse, 37*(2), 104–107. <https://doi-org.ezp.waldenulibrary.org/10.4037/ccn2017369>
- Roussel, L., (2013). *Management and Leadership for Nurse Administrators* (6<sup>th</sup> Ed.). Burlington, MA: Jones & Bartlett Learning, LLC. Stufflebeam, D. (2007). CIPP evaluation model checklist. *A tool for applying the CIPP Model to assess long-term enterprises* (2<sup>nd</sup> ed.) [https://www.wmich.edu/sites/default/files/attachments/u350/2014/cippchecklist\\_mar07.pdf](https://www.wmich.edu/sites/default/files/attachments/u350/2014/cippchecklist_mar07.pdf)

- Taylor, J.S. (2015). Improving Patient Safety and Satisfaction With Standardized Bedside Handoff and Walking Rounds. *Clinical Journal of Oncology Nursing*, (4), 414. <https://doi-org.ezp.waldenulibrary.org/10.1188/15.CJON.414-416>
- Terry, A. (2015). *Clinical research for the doctor of nursing practice* (2<sup>nd</sup> ed.). Burlington, MA: Jones & Bartlett Learning.
- Walden University. (2018). Doctor of nursing practice: Overview. Retrieved from <https://academicguides.waldenu.edu/doctorscapstoneresources/dnp>
- Walden University. (2018). Research Ethics & Compliance: Walden Research Ethics and Compliance Policies. Retrieved from <https://academicguides.waldenu.edu/c.php?g=120436&p=6688094>
- White, K. M., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health care practice*. New York, NY: Springer.
- Zaccagnini, M. E., & White, K. W. (2011). *The doctor of nursing practice essentials: A new model for advanced practice nursing*. Sudbury, MA: Jones & Bartlett.



## Appendix A: Standard Process Description: Disposition of ED Patients to Units

### Process Description:

This process is to be followed for communication of vital information from the ED to the receiving unit nurse for continuance of care. The process begins upon receipt of the bed assignment and ends when the patient leaves the emergency department.

### Who Must Use this Process?

Emergency department RNs, PCTs, and Unit Representatives

### Process Requirements:

Process Step (in sequence)	Detailed Steps (in sequence)	Cycle Time	Comments/ Notes
Order Reconciliation	<ol style="list-style-type: none"> <li>1. Confirm admitting physician orders are received.</li> <li>2. Confirm bed assignment matches admitting physician order.</li> <li>3. If no for steps 1 and/or 2, call admitting physician, obtain orders, and clarify bed placement. Notify bed</li> </ol>	5-15 min	Admit Request level of care and Admittin g Order level of care may

Communication to receiving unit.	<p><b>Level of Care: Med-Surg or Progressive Care</b></p> <ol style="list-style-type: none"> <li>1. Emerg Department RN calls the receiving unit UR.</li> <li>2. Emerg Dept RN informs the UR, RN, or Charge RN on the receiving unit "I am calling about XXXXX, going to room XXXa. Please ask the nurse to review that chart and call if he/she has any questions or we will send the</li> </ol>	5-15 min	Receiving nurse has 15 minutes to call with any questions.
Patient Preparation	<ol style="list-style-type: none"> <li>1. Emerg Dept RN, PCT, or designee prepares the patient for transport to receiving unit.</li> <li>2. ED RN or PCT informs patient/family of the patient's</li> </ol>	5 minutes	

Telemetry	<p><b>Level of Care: Critical Care, Step-down, or Progressive Care with Cardizem infusion:</b></p> <ol style="list-style-type: none"> <li>1. ED RN prepares portable ED transport monitor.</li> <li>2. Add portable ED transport monitor to patient encounter in central monitor station.</li> </ol>	5 minutes	Receiving unit responsible for notifying tele tech when the patient is placed on the receiving
Transport	<p><b>Level of Care: Critical Care, Step-down, or Progressive Care with Cardizem infusion:</b></p> <ol style="list-style-type: none"> <li>1. ED RN moves patient monitoring cables to transport monitor.</li> <li>2. Patient transported to receiving unit accompanied by RN.</li> </ol> <p><b>Level of Care: Med-Surg, Progressive Care without Cardizem infusion:</b></p>	5-10 minutes	

## Appendix B: Standard Process for Nurse-to-Nurse Tablet Handoff

### Med/Surg Department Process Description:

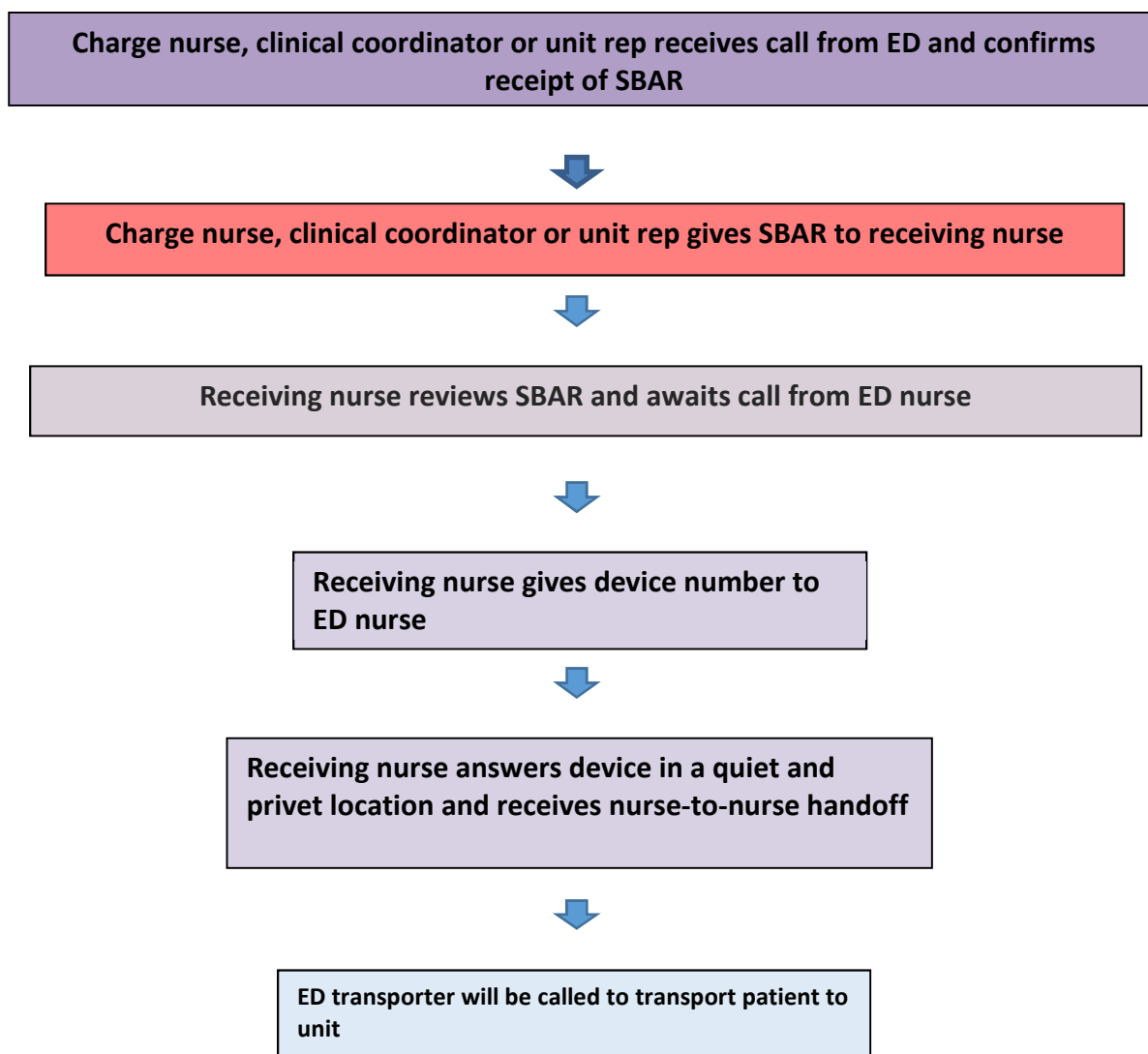
This process is to be followed for all patients admitted from the Emergency Department to Second Floor.

### Who must use this process?

Bed management, Nursing, Clinical Coordinators, ED Physicians and Hospitalist

### Process Requirements

Bed assigned, and physician orders written.



## Appendix C: Standard Process for Nurse-to-Nurse Tablet Handoff

### Emergency Department Process Description:

This process is to be followed for all patients admitted from the Emergency Department to Second Floor.

### Who must use this process?

Bed management, Nursing, Clinical Coordinators, ED Physicians and Hospitalist

### Process Requirements

Bed assigned, and physician orders written.

