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Admission Handoff Between Emergency Department and Inpatient Units

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Abstract

When admitting a patient from the emergency department (ED) to an inpatient unit, a handoff report is conducted. There are many ways the ED nurse can go about delivering this report to the inpatient or floor nurse. Each ED nurse tends to this task in their own way, providing the information they deem important. Due to the absence of standardization, handoff reports have the ability to lack important information regarding the patient and can even lead to compromising the safety of the patient.

The purpose of this project was to gain a comprehensive understanding of the current handover process of admitted patients from the ED to floor units. An extensive assessment was conducted including in person qualitative questionnaire interviews, as well as Likert scale satisfaction surveys. 95 responses were generated in qualitative and quantitative forms, of that 20 nurses responded to the quantitative nursing satisfaction Likert scale and 75 nurses responded to the qualitative nursing questionnaire interview.

It was found that 90% of inpatient nurses were satisfied with the report from the ED nurse. However, 22% inpatient nurses did not believe that they received enough information to provide safe care for their patient and 34.5% stated that they had been involved in an error or near miss experience related to a lack of communication from the report. Nurses were also asked to identify issues associated with handoff, 59% of inpatient nurses reported that the handoff was not given from the primary nurse, 44% of nurses stated the report was not detailed enough, and 38% of nurses believed the report lacked organization. Due to these findings, handoff can be altered to provide a more seamless transition of admitted patients. An intervention may include implementing a training session on how to successfully navigate the electronic healthcare

record's features to maximize the nurses utilization of tools and opportunities to produce an exceptional and comprehensive handoff.

Statement of the Problem

Emergency Department (ED) nurses have a responsibility to conduct a handoff report to the floor unit when a patient is to be admitted to the unit. The handoff process is defined as the transfer of care services between healthcare providers (Abraham, Kannampallil, Almoosa, B.P. Patel, & V.L. Patel, 2014, 311.e1) and in many cases is received with poor satisfaction from the floor units due to a variety of reasons. These reasons include differences in profession, language, communication, and expectations of the healthcare professional providing the handoff (Abraham, et al., 2014, 311.e1) Due to these findings, there is much room for improvement of the handoff process between the ED and floor units. The purpose of this project will be to gather information on the current handoff process. This will include nursing satisfaction of the process with the aim of discovering essential components of handoff and focusing on the safety of the patients.

The process for emergency department handoff with critical care and medical surgical units will be examined and reviewed at a local magnet hospital. The barriers of the handoff will be examined to determine if there is room for improvement of the handoff process amongst the emergency department and floor units, as evidence suggests.

A Master of Science in Nursing (MSN) Clinical Nurse Leader (CNL) student will do a CNL quality improvement project, which proposes to meet five goals. First, to assess the current satisfaction of nurses with the handoff process. This will consist of in person qualitative questionnaire interviews as well as a Likert scale satisfaction survey to gather information on the satisfaction of the current handoff procedure. Second, to improve nursing satisfaction and to

create a culture of cooperation between ED nurses and nurses on the units by managing expectations for handoff. This can be measured by an increase in the nursing satisfaction survey score. Third, nurses will be able to maximize their utilization of tools and opportunities with Epic to deliver a comprehensive handoff. This will be measured by an increase in the amount of nurses who rely on tools, specifically use Epic's features while giving handoff. Fourth, to develop a safe and effective handoff that facilitates clear communication between nurses to promote better outcomes among John Muir's patient population. This can be measured by an increase in the nursing satisfaction survey score. Fifth, establish and create sustained trust between Emergency Department Nurses and receiving floor nurses. This is to be measured by an increase in the nursing satisfaction survey score.

Overall, it will be the goal of the MSN CNL student to develop a safe process for handoff that is received positively by ED and floor nurses. The MSN CNL student will examine and review the process for ED to inpatient handoff in an effort to ensure that trust is developed and maintained and essential information is given to the receiving nurse by standardizing a fair and safe handoff process. Issues surrounding handoff directly impacts patient safety, nursing satisfaction, and HCAHPS scores.

Rationale

The leadership team, consisting of the Director of the ED, Director of Critical Care and Medical Surgical Units and the Director of Nursing Professional Practice, presented this topic to the MSN CNL student. From the discussion, it was noted that there was room for improvement of the current handoff process from the ED to floor units. It was determined that the MSN CNL student would discover in detail the problems associated with the current handoff process. After

an extensive root cause analysis, here are some of the reasons for this program to take place. It was discovered by the MSN CNL student with the use of a Likert-Scale and a Qualitative Questionnaire that 10.5% of nurses are not satisfied with the current handoff procedure, 23.4% of nurses do not believe they receive enough information to provide safe care for their patients, and 34.5% of nurses reported being involved in an error or near miss experience due to miscommunication with the handoff report. Due to these results, the MSN CNL student determined it would be highly beneficial for this program to take place.

Literature Review

Although patients are frequently admitted to inpatient units from the ED, it was found that ED admissions were the subject of only 9 of over 640 published items (Hilligoss, Mansfield, Patterson, & Moffat, 2015, p. 134). Literature focuses attention to physician handoffs and intra-unit handoffs, including nursing shift change. While there is a lack of literature on the topic regarding nursing handoff from the ED to floor units, some major themes can be found in the current research. The literature reviewed was conducted using PubMed and CINHAL databases. Using the keywords “Handoff”, “Emergency Room” and “Continuity of Care”, while limiting to articles published within the last 10 years yielded many results. However, after reading through the articles, it was found that 22 articles were appropriate for this project, and of that, 8 were actually used. These articles included muti-method studies, descriptive study designs, prospective observational studies, and systematic approaches.

Handoff is defined as a tool that serves a critical function, as it is an essential process of ensuring continuity of care for the patient. It takes place during times of transition when healthcare professionals discuss patient information and plan the next steps for the patient’s care.

(Apker, Mallack, & Gibson, 2007, p. 887). These times of transition often include admission, treatment, and discharge. Handoff is important in keeping all members of the healthcare team on the same page for the benefit of the patient.

A multi-method study involving documentation review, semi-structured individual interviews, and focus group interviews was conducted to observe the handoff from the ED to the ICU. This study found that there was no structure or consistency of handover reports. It was determined that nurses from both departments, as well as the patient, would benefit from a structured tool to guide the process to ensure relevant information is available. The study also noted that organizational considerations must be addressed, as ED and ICU nurses need uninterrupted time for the handover process. (McFetridge, Gillespie, Goode, & Melby, 2007, p. 269). These results reflect the need of a framework for the handoff report. With a structured guide, the nurse is able to provide all relevant and necessary information regarding the patient. Without a tool, essential information may be easily overlooked and has the potential to compromise the patient's safety and wellbeing.

Researchers Chapman, Schweickert, Swango-Wilson, Aboul-Enein, and Heyman (2016) utilized a descriptive study design to uncover nurses satisfaction with implementing the use of an information technology (IT) tool during bedside handoff. This article found that 72%- 86% of nurses were satisfied with the SBAR IT tool, as it encourages standardization of the handoff process (Chapman et al., 2016, p. 317). This article gives insight into the satisfaction of nurses with using a tool, such as SBAR. This article delves in a little deeper by observing the differences of satisfaction amongst those of varying age, sex, race, education, years of nursing, and years working for the organization. For example, it was found that junior nurses, up to 14

years of experience, were less satisfied with the tool than senior nurses, those with 15 or more years of experience (Chapman et al., 2016, p. 315). This data allows nurse leaders to understand the differences of their nurses and develop various strategies as necessary.

Maughan, Lei, and Cydulka's (2011) prospective observational study examined ED to inpatient handoff amongst physicians. The study discovered 130 (13.1%) handoff errors and 447 (45.1%) omissions occurred out of the 992 patients observed. Examination errors were associated with longer handoff time per patient. It was found that fewer examination omissions were associated with the use of support materials. These materials consisted of both written and electronic sources. Laboratory handoff errors occurred in 37 (3.7%) of the handoffs and omissions in 290 (29.2%) (Maughan et al., 2011, p. 502). Electronic support tools were associated with fewer laboratory errors, and longer ED lengths of stay resulted in more laboratory handoff omissions. Since these errors and omissions were found to be associated with handoff time per patient, ED length of stay, and use of support materials, it is essential to consider these aspects. These findings suggest that with the use of support materials when conducting handoff, errors and omissions can be decreased significantly.

A systematic approach was used to discover and address the ED to inpatient handoff process amongst physicians by utilizing the Joint Commission Center for Transforming Healthcare's Targeted Solutions Tool (TST). The contributing factors were addressed by targeted solutions suggested by the TST. Overall, this study found that the online TST application was associated with improvement of ED handoff. A total of 211 random handoffs were studied. The results suggest that 29.9% of handoffs were defective. This rate decreased to 12.5% after implementing the targeted solutions (Benjamin, Hargrave, Nether, 2016, p. 111). Communication

between the ED and admitting physicians improved with the utilization of the TST application and its solutions. This data can be translated to the nursing field to suggest a potential framework to close communication gaps with the nursing handoff process.

These articles portray the importance of the ED to inpatient handoff and that breakdown in communication is prevalent. It is evident that with the use a developed tool, these communication breakdowns can be decreased or even eliminated.

Cost Analysis

For this project, there is no tangible cost analysis. This project relies on the satisfaction of nurses with the handoff procedure, and does not result in financial obligation. However, a theoretical cost analysis can be analyzed for various factors that may come in to play.

During the root cause analysis and literature review, it was determined that safety compromised due to a poor handoff from the ED to floor units is prevalent. The question can be asked as to what would happen if a patient's life was compromised due to an inadequate handoff? According to Benjamin et al. (2016), approximately 200,000 Americans die due to preventable medical errors and hospital acquired conditions. Legal fees, cost of time and effort into the investigation, and the cost of the patient dying are all aspects that must be considered. In 2008, it was estimated that medical errors in the United States resulted in approximately $19.5 billion dollars and of that, $17 billion (87%) was associated with additional medical costs. (Andel, Davidow, Hollander, Moreno, 2012). Medical errors pose a great threat to the economy, by improving the handoff procedure, the quality of care can be improved upon and medical errors decreased, thus saving billions of dollars.

The costs of a transport nurse is another aspect that can be considered. If a nurse is employed with the soul purpose of transporting patients from the ED to the floor units this would come out to approximately $786 per shift. This was calculated by using the average salary for this hospital, which $65.50 an hour for a 12 hour shift. Since two twelve hour shift nurses are needed to complete the 24 hour day, approximately $1,572 is needed. To provide a transport nurse for 24 hours for an entire year, this would come to $573,780.

The MSN CNL students spent a total of 37 days observing the units for 6 to 8 hours per shift, for a total of 259 hours. Using the average salary for an RN at this hospital of $65.50 per hour, it would equate to $16,964.50 to complete the observations, interviews, and data collection.

Project Overview and Methodology

This work was a collaborative effort of a group of MSN CNL students. This MSN CNL student's contribution was meeting with the leadership team to determine the course of action, developing a project proposal, conducting an extensive literature review on handoff reports, developing tools to use to gather data, visiting all four units to observe workflow, observing handoff reports, and conducting Likert scale nursing satisfaction and qualitative questionnaire interviews. This MSN CNL student visited the ED twice, the Medical-Surgical unit twice, the PCU three times, and the ICU twice. Each shift lasted approximately 6 to 8 hours. This CNL contributed to data collection and the formation of the intra-unit admission handoff findings presentation to be presented to the leadership team.

The Likert scale and qualitative questionnaire were developed from a group effort. The group used search engines such as Google to find prototypes of these tools. After researching what these tools consisted of, the group developed the tools based off of their needs regarding the

data they were to collect. The tools were reviewed and edited extensively until they covered all of the aspects that the leadership team requested they delve into. See Appendix B.

Clinical Microsystem Assessment

Patient Population

Patients who were admitted from the ED to the ICU, PCU, or Medical-Surgical floor were appropriate for this project. Patients were admitted for a variety of reasons including, but not limited to, sepsis, pneumonia, chronic heart disease, respiratory failure, trauma, etc. Patients were male and female. The ages varied, but typically were of the adult age. Overall, 20 patient admissions were observed from the ED to floor units.

Professionals

The ED is overseen by a nursing director. The staff consists of a charge nurse, triage nurses, staff nurses, resources nurses, physicians, ED technicians, pharmacists, respiratory therapists, laboratory technicians, etc. The floor units have a very similar structure. They are overseen by a nursing director. The staff consists of a charge nurse, staff nurses, resources nurses, physicians, CNA's, pharmacists, respiratory therapists, physical therapists, laboratory technicians, etc.

For this project, 20 staff nurses participated in the Likert scale nursing satisfaction survey and 75 staff nurses participated in the qualitative nursing questionnaire.

Patterns

The ED and floor units are open 24 hours a day. Charge nurses meet daily with their staff at shift change for a team huddle to discuss the issues on the unit. The flow of the ED is highly dependent upon the amount of patients and their acuity. During the hours of 10 to 11 am, the ED

appeared to have more downtime than that of the 3 pm hour. The ED flow picked up significantly when traumas presented to the department, which occurs at random. While the ED had bursts of high patient flow, the floor units had consist patient presence on their units. For example, one day on the unit, the medical-surgical unit was at maximum capacity the entire shift, requiring all nurses to care for 4 patients at a time. The ED and floor units differ in the fact that at any time a patient can present to the ED, whereas the floor unit population does not change as abruptly. Due to these patterns, the ED and floor units have very different priorities of their tasks and expectations of each other. These patterns significantly play into quality of ED to inpatient admission handoff.

It was observed that many of the ED nurses view their patient's chart on Epic, the hospitals electronic healthcare record (EHR) system, as they give report to the floor unit. It was also found that some floor nurses prefer to look up the patient they are expecting in Epic prior to receiving report. Another pattern worth noting is that at times, handoff from the ED is not given by the primary nurse caring for the patient, but rather another ED nurse. This process was noted by the ED to represent teamwork and save time for the nurses. The floor nurses noted much frustration, as they felt the non-primary nurse was simply reading the chart to them and did not have all of the necessary information.

Processes

The handoff typically follows a consistent process. The ED physician consults with the admitting physician regarding the patient who requires further care. The admitting physician puts in orders to admit this patient, along with orders consisting of medications, plan of care, etc. These orders are typically to be carried out by the floor nurse. Once the orders are in Epic, the

ED nurse can call upstairs to the floor unit to give handoff report on the patient. If the floor nurse is unavailable at this time, they have 10 minutes to return the call. Once speaking, the ED nurse gives report on their patient. The inpatient nurse can interject at any time to ask any follow up questions that they might have. After the report it given, the ED nurse finishes up their care with the patient and the patient is then taken to the unit. Depending on the acuity of the patient and the floor they are going to determines if a RN must transport the patient, or if an unlicensed personnel can transport the patient. If the primary nurse for the patient transports the patient, this gives the nurse an opportunity to update the inpatient nurse in person on any changes that may have occurred since their phone call.

Purpose

The purpose of ED handoff to the floor units is to inform the floor of the patient that they will be receiving. The handoff is a comprehensive and thorough conversation, typically held over the phone to discuss the patients status and their plan for care. Simply put, the ED nurse explains why the patient came to the ED, what has occurred since in the ED, and what will need to occur once on the unit. The ED handoff may consist of, but is not limited to diagnoses, reason for admission, vital signs, medication prescriptions, medications given in the ED, allergies, code status, pain level, plan of care, skin status, mobility level, laboratory results, imaging results, behavioral issues, if the patient is incontinent, if the patient is on isolation precautions, a head to toe assessment, whether the patient is on telemetry, if the patient is a fall risk, current status, social situation, chronic history, IV rate and medication, any abnormal findings, or specific assessments, such as a neurological assessment. A lot of information is important for ED to inpatient handoffs and therefore essential information can be easily overlooked. It is important to

keep in mind that each patient presents for various reasons, and therefore every report will differ based on their needs.

Timeline

See Appendix A.

Expected Results

The outcome of this project was to gain a better understanding of nurses satisfaction with the current handoff procedure from the ED to the floor units. The purpose of this project was not to transform the handoff, but rather to understand what was going on in this process. From this project, the MSN CNL student hopes to develop general impressions regarding the ED handoff to inpatient units procedure. By using the developed tools, the MSN CNL student expects to draw conclusions based on nursing satisfaction with the handoff.

From the qualitative interview the MSN CNL student expects to understand problems identified and changes nurses would like to see with handoff, essential components of handoff, cultural differences between the units, if the nurse believes there is teamwork between the ED and floor units, expectations of the other nurse during handoff, whether errors or near misses have occurred due to an inadequate handoff, and if they prefer report conducted verbally over the phone, face to face in person, or faxed to them.

From the Lickert scale, the MSN CNL student expects to understand if the inpatient nurse feels they received all the necessary information during the handoff process, if the handoff was conducted in a professional and confidential manner, if there was adequate time for handoff, if they are satisfied with the current handoff procedure, and if the current handoff structure allows them to safely care for their patient.

Nursing Relevance

A proper and thorough handoff report is extremely important when admitting a patient from the ED to a floor unit. When the handoff is lacking in information, this can lead to potential problems for the patient. It is essential that nurses provide a complete handoff for the safety of their patient. This is important to the patient so that all members of their team are knowledgeable of their condition and understand the plan of care. This is important to the nurse so they can deliver exceptional patient care. By having a poor handoff, this may add extra work to the inpatient nurse who then has to research what may have already been discovered in the ED. It is essential for nurse to use clinical judgment to plan for optimization and safety, this is less manageable when they are denied the information of their patient. To the community, having a proper handoff ensures safety for all.

This project portrays the nursing competencies of patient-centered care, teamwork and collaboration, safety, as well as informatics. The handoff process must be individualized per patient to provide complete information to the inpatient nurse. By doing so, the nurse is exemplifying patient-centered care. Teamwork and collaboration are also essential concepts, as the ED nurse and floor nurse must work together to fill in any gaps of the handover process. The ED nurse must be willing to share a complete assessment and the floor nurse must be engaged to ask any follow up questions as necessary. The nurses must work together for the benefit of their patient. Next, safety is an essential nursing competency of the handoff process. Nurses must always have patient safety at the forefront of their minds, especially when handing off the patient to a new healthcare provider. Lastly, informatics has the ability to play a strong role in the handover process. As previously mentioned, EHR’s have the potential to make significant

contributions to the quality of handover, thus ensuring patient safety and patient-centered care. By using a tool to guide handoff, nurses are able to provide a comprehensive report of their patient.

From the CNL perspective, it is very important that the qualified person study this process. The CNL brings many valuable qualities including the knowledge and time to complete performance improvement projects. The CNL has the ability to confidently recognize a healthcare issue using root-cause analysis, collect and extensively analyze information, problem-solve and make evidence-based recommendations. The CNL can confidently design, implement, and evaluate care in order to promote health and reduce risks in various communities, all while being cost-effective.

Overall, this project has required 259 hours of direct observation. Not many professionals have that much extra time on their hands, not to mention the training a CNL has to critically approach the situation and develop the proper tools for an assessment. CNL's have the time to thoroughly complete a quality project because they do not take care of the patient one on one, but rather devote their time to performance improvement.

Summary Report

Root Cause Analysis

After conducting a thorough root cause analysis, it has been found that many factors affect the handoff process. These contributing factors consist of cultural differences, varying concepts of teamwork, time constraints, and technology.

The cultural differences of the ED and floor units are a major contributing factor affecting the handoff process. While ED nurses are focused on stabilizing the patient, the floor nurses

require a holistic understanding of their patient in order to provide the best care. The differences of the units result primarily from how the patient presents to their unit, not a developed attitude. Inpatient nurses overwhelmingly expressed their understanding of the differences of their job function compared to the ED nurses. While floor nurses might not always receive a comprehensive assessment from the ED, they do understand the cultural differences of the units.

Along with cultural differences, the units perceive teamwork very differently. The ED staff noted a strong sense of teamwork and collaboration when a colleague would handoff their patient for them. The ED nurses are often tending to a variety of tasks and felt that by giving report for another nurse relieves them of a task. Unlike the ED, the inpatient nurses did not perceive this as teamwork, but instead as cutting corners. If the primary nurse is not giving the handoff report, they are not able to receive the most thorough assessment.

Time constraints play a strong role in the quality of handoff and has been noted as a reason why the primary ED nurse does not always give the handoff for their patient. The flow in the ED can change at any moment, especially when a trauma presents. When a nurse is caring for a critical patient their priority is stabilization, not handing off their already stable patient. This is an example of when a non-primary nurse might call upstairs to give report on the patient. Lunchtime is also a factor that prevents primary nurses from giving report. On the inpatient side, it was discovered that ED nurses had called them during shift change or while another patient was already being admitted to them. These constraints prevented the inpatient nurse from taking report in a timely manner.

Lastly, technology was found to be affecting the quality of the handover report. It was noted that there is a tab in Epic that displays the ED summary of the patient. However, it was not

consistently found that nurses were utilizing this tool. This tool provided a brief summary of the patient and should be further studied to determine why nurses were not using it. A reason noted by a newly oriented ED nurse was that he was never introduced to tab and therefore did not know to use it.

Redesign of the Process

While a lot of valuable information was generated during this project, some changes could have contributed to a smoother process. Firstly, it would have been highly beneficial to have had a designated contact from the leadership team. The directors were extremely busy as expected. By having a designated contact who had the mission of this project in mind would have been very beneficial. The ED and inpatient staff were not always aware of the MSN CNL student's purpose on their unit, thus creating resistance at times. With a designated contact, this transition could have been smoother. This person would have been the contact to which the CNL MSN student ask any questions or run ideas by. This individual would be available, easily approachable, and impressionable on the units.

In addition, it would have been advantageous to have initially engaged the ED staff members. By allowing the staff members to express their concerns of the unit for a performance improvement project, rather than the management, the staff may have been more invested in the project. Initially, the MSN CNL student was to assess the ED extensively. However, resistance was met when assessing in the ED. Because of this, the MSN CNL student reconfigured and determined it was best to spend the remainder of the time assessing the floor units, where nurses readily engaged with the MSN CNL student, expressing their opinions on the matter.

The MSN CNL student also initially set out to observe handoff process from the ED and floor unit nurses simultaneously. To do so, one student would be listening to the report from the ED side and another student would be listening from the floor side. Once on the units, it was found that this was not feasible. Since handoff must be given within 10 minutes of the order, per hospital protocol, this was not enough time to inform the MSN CNL student on the floor unit of which floor to be on and which nurse to find. Due to this challenge, the MSN CNL student decided time was best spent observing one side of the handoff process.

Results

Overall, 95 responses were generated in qualitative and quantitative forms. 20 nurses responded to the quantitative nursing satisfaction Likert scale and 75 nurses responded to the qualitative nursing questionnaire interview. Due to time constraints, not all nurses were able to respond to all of the questions.

From observations and data collection tools, it was found that the nurses were generally satisfied with the handoff report. They reported feeling a sense of teamwork and satisfaction and understanding of the differences between the units. The main consensus of the floor nurses is that they wish too see the handoff report given by the primary nurse caring for the patient. It was discovered that the most essential components of handoff report are why the patient is being admitted and what medications have been given to the patient.

According to the Likert scale, 17 of 19 nurses reported satisfaction with the report they had just received. In the qualitative interview, 90% of the inpatient nurses stated that they were satisfied with the report. In the Likert scale, about 22% in-patient nurses did not believe that they received enough information to provide safe care for the patients. 34.5% of nurses stated that

they had been involved in an error or near miss experience related to a lack of communication from the handoff report. In the qualitative questionnaire, nurses were given the opportunity to discuss the errors they encountered. Some of the errors discussed included medication errors, patients being put at risk for infections, patients being put at risk for falls, and delays in treatment or procedure.

In the qualitative questionnaire, nurses were asked which type of report they preferred. 95% of nurses reported that verbal, over the phone, was their preferred form of communication for handoff. Some nurses pointed out that they also value when the nurse who gave report brings the patient to the room and provides any updates since their call.

After synthesizing the data, 14 main problems were identified in regard to the essential components of the handoff report. Of these 14, the top three problems were identified. 59% of nurses reported the report was not received from a primary nurse, 44% of nurses stated the report was not detailed enough, and 38% of nurses believed the report lacked organization. Other problems that were identified were that there was a lack of time for the report, inappropriate timing of report such as during shift change, interruptions occurred, the patient's lab values were not provided, the patient inappropriately triaged to that floor and required immediate transfer for another level of care, cultural differences were noted between the units, the expected time frame of 10 minutes for calling report was not always possible, and the patient's orders were not dropped until patient was physically on unit causing a major delay in diagnostic testing and administration of critical medications.

A significant finding was not part of the questionnaire, but consistently nurses mentioned how busy the ED nurses were how their priorities were very different from their own. They

explained that they understood there were cultural differences between their units and recognized the ED nurses did not have time to give them all of the aspects of report that they believe provides a full assessment of the patient. It was found that the ED nurses viewed giving report on their colleagues patients as collaborative and an essential function of their unit. Reasoning behind giving report for other nurses was explained as helping improve throughput times by getting the patient admitted as quickly as possible. This varies greatly from the floor nurses perspective on handoff coming from the non-primary nurse. Due to these findings, it is essential to discover and address the ED's constraints that get in the way of having the primary nurse conduct handoff.

Implementation

Due to time constraints, it was not possible to implement fully. Below are theoretical implementation plans that would have been thoroughly developed and implemented. They will address the issues of the non-primary nurse giving handoff, promotion of a culture of cooperation, and utilization of electronic tools for a successful handoff.

As explained in the redesign process, resistance was met in the ED leading to very limited data. It would be highly beneficial for the MSN CNL student to present to the ED to study the barriers of having the primary nurse give report for their patients being admitted. The student will shadow an ED nurse and thoroughly study these barriers. The student will note what primary nurse is doing instead of giving handoff on their patient. The MSN CNL student will determine if it is feasible for the primary nurse to give handoff and determine how to evaluate the process. The MSN CNL student would potentially like to pilot a program to relieve the primary nurse of other duties when report is to be called. The resource nurse or colleague who is giving report for

the nurse will instead attend to the primary nurse's task that is preventing them from giving report.

The leadership team strongly emphasized their desire to continue and expand upon the culture of cooperation between the ED and floor units. To manage the units expectations, it would be beneficial to pilot a program where ED and floor units can shadow each other. The ED nurses would have the ability to shadow the floor nurses for a shift, and vice versa. By doing so, this would allow nurses to get a better understanding of the other unit's priorities and cultural differences firsthand.

The leadership team suggested the use of an electronic source to improve the handoff process. The literature review also suggested the use of an electronic tool as being advantageous for the handoff process. The MSN CNL student proposes to implement a training session on how to successfully navigate Epic's features to maximize their utilization of tools and opportunities to produce an exceptional and comprehensive handoff.

Evaluation

The MSN CNL student will evaluate the new processes thoroughly. The student will evaluate the first potential implementation by researching nursing satisfaction, the affect on patient safety, and the added benefits or disadvantages to the implementation. This evaluation will be done by quantitatively surveying the nurses on their satisfaction, qualitatively asking the nurses of the pros and cons of the implementation, and accessing the errors that have occurred prior to and after the implementation. A comparison will be made to determine the benefit or disadvantages. The student expects to see an increase in nursing satisfaction and patient safety.

The MSN CNL student will evaluate the culture of cooperation with a survey. The MSN CNL student expects to see an increase in the nursing satisfaction survey score after the nurses shadow a nurse on the other unit.

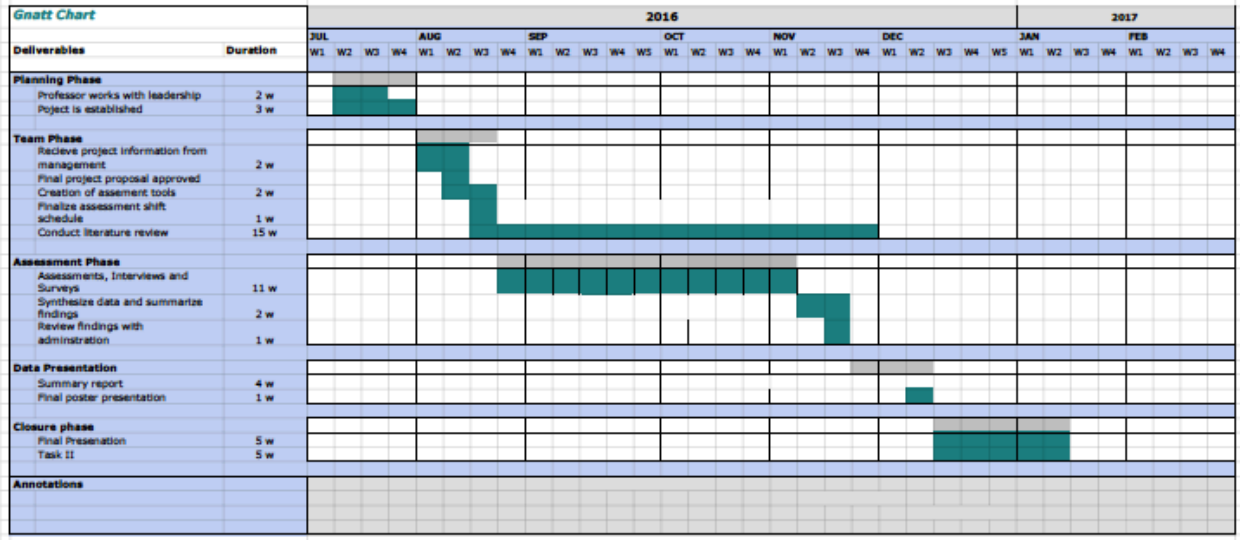
The MSN CNL student will evaluate the Epic training session by comparing how many ED nurses use Epic's features to give handoff before the training and after the training. This will be done by direct observation. The student expects to see an increase in the utilization of Epic's resources.

Conclusion

Handoff is an essential function and job duty of nurses. It has been found to be highly beneficial that the primary nurse gives handoff report on their patient, rather than another nurse who is not as familiar with the patient. As an RN, this has been a very valuable learning experience of how the culture of the ED and floor units vary and how different they view the handover process. As a future CNL, this project has been a great learning lesson. Quality performance and improvement projects are very time consuming and require a tremendous amount of dedication and collaboration. The CNL is the perfect professional to tend to healthcare issues due to their extensive education at the masters degree level and the time that they are able to devote to their projects. It is highly beneficial if the CNL is connected to the organization in which they are assessing. By being respected by the staff, the CNL will have a smoother approach in their assessments and acceptance of their implementation. A lot has been learned from this experience that will be conveyed in future CNL projects.

Appendix A

Timeline



Appendix B

Likert-scale nursing *satisfaction* with ED to Inpatient handoff report
(for Inpatient Unit Nurse)

1. I received all the necessary information during the handoff report

1	2	3	4	5	6	7	8	9	10

Disagree **Agree**

2. The handoff was conducted in a professional and confidential manner

1	2	3	4	5	6	7	8	9	10

Disagree **Agree**

3. There was adequate time for handoff

1	2	3	4	5	6	7	8	9	10

Disagree **Agree**

4. I believe not enough information was shared

1	2	3	4	5	6	7	8	9	10

Disagree **Agree**

5. I am satisfied with current handoff procedure

1	2	3	4	5	6	7	8	9	10

Disagree **Agree**

6. I feel the current handoff structure allows me to safely care for the patient

1	2	3	4	5	6	7	8	9	10

Disagree **Agree**

Appendix B continued

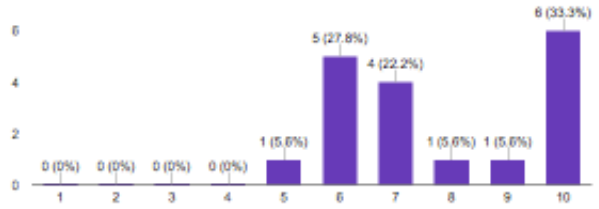
Qualitative Questions Nursing Perceptions on Handoff
(Interview Questions)

1. Do you feel like the current handoff includes enough pertinent information for you to provide the best possible and safest care for you patients?
2. What do you think would make handoff practices better?
3. What are some of the essential components given in handoff that you could not do your job without?
4. Do you feel there is a lack in standardization in handoffs, which affects your patient's care? Do you feel that reports are disorganized?
5. Have you ever been involved in or witnessed an error or a near-miss related to lack of communication during report?
6. Do you think inadequate amount of time dictates the type of hand off you give or receive?
7. What type of handoff report do you prefer: verbal, written, faxed, face to face, etc?
8. Is a verbal handoff preferable to a document on Epic?
9. Do you think the culture of the different floors promotes or hinders hand off report?
10. Do you believe there is teamwork between the ED and your unit?
11. What are your expectations of the other nurse during the handoff process?

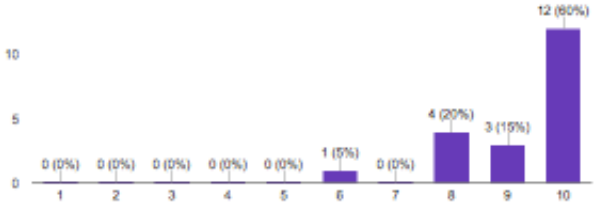
Appendix C

Results

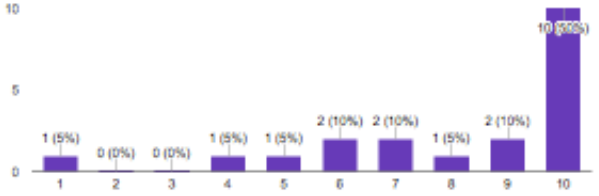
I received all the necessary information during the handoff process
(18 responses)



The handoff was conducted in a professional and confidential manner
(20 responses)

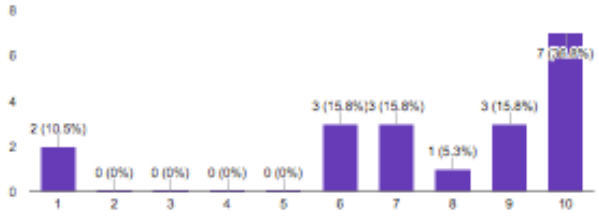


There was adequate time for handoff (20 responses)

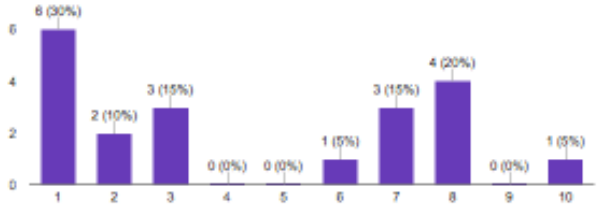


Appendix C continued

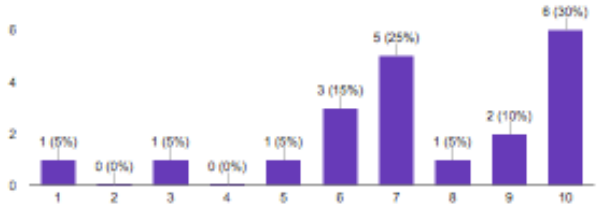
I am satisfied with current hand procedure (19 responses)



I believe not enough information was shared (20 responses)



I feel the current handoff structure allows me to safely care for the patient (20 responses)



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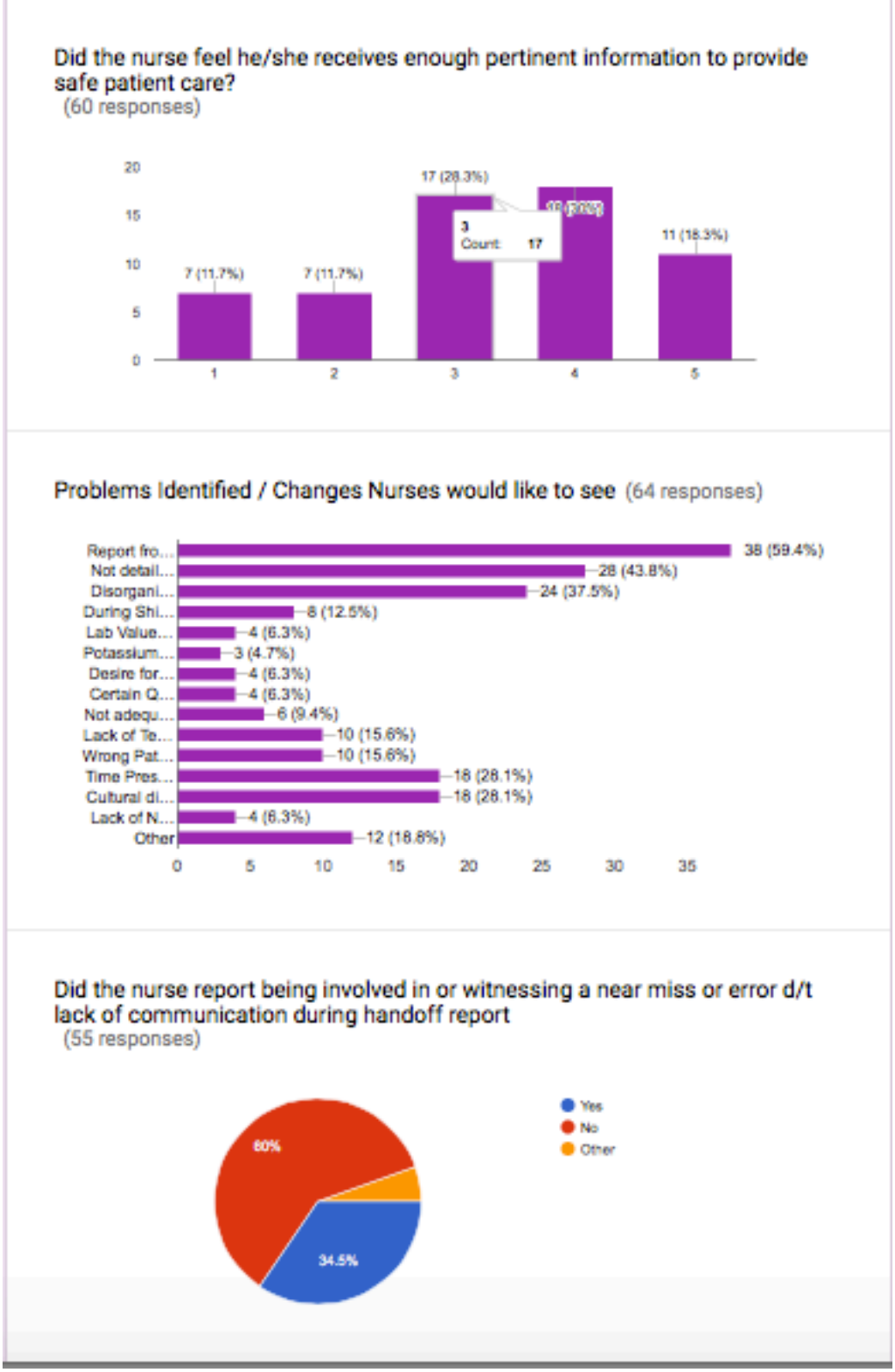
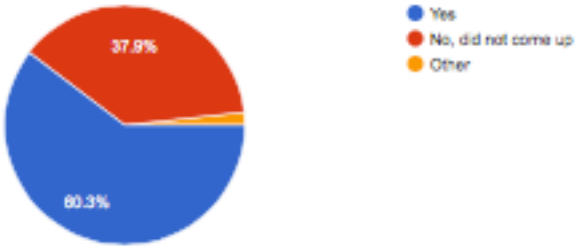
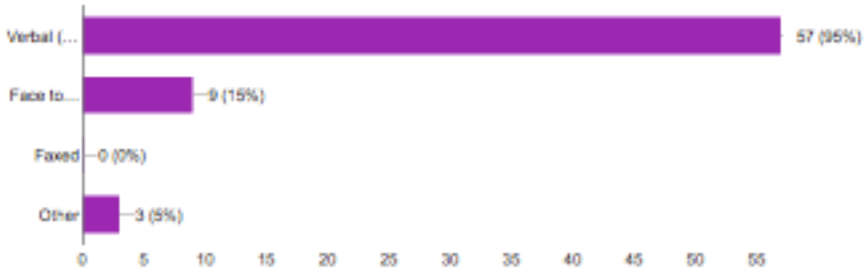


Appendix C continued

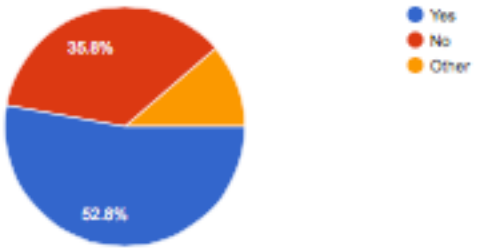
Did the nurse at some point indicate understanding of sending unit's culture: eg. "I understand the ED is busy..."
(58 responses)



Type of report preferred (60 responses)



Did the nurse believe there was teamwork between units? (53 responses)



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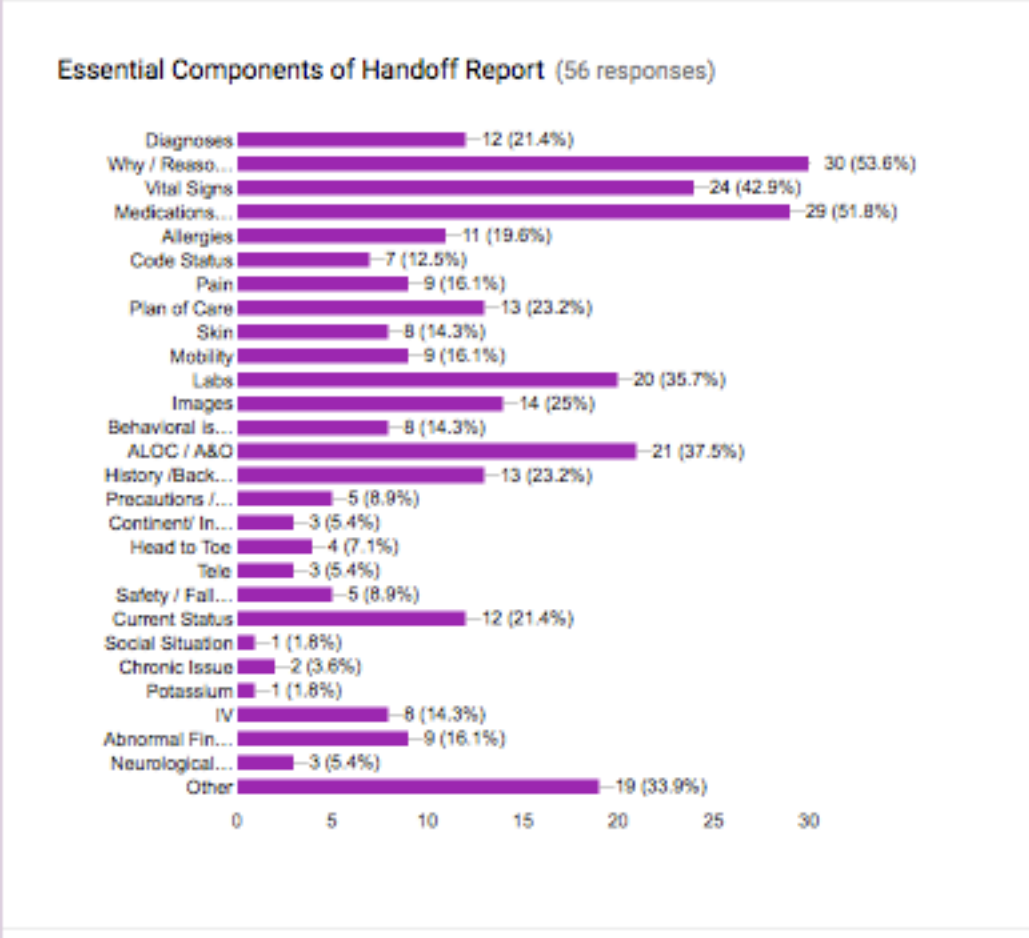

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