

Increasing Patient Safety and Staff Accountability with Medication Form

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Abstract

Medications are absolutely necessary in assisting in the care of patients within the medical system. Medications can be used to cure infections, manage diseases, and alleviate pain. The proper use of medication has a profound purpose in patient care but it is imperative for medication, its storage, its dispensation, and its interactions with other medications to be acknowledged and respected by those administering the medication. One study suggested five main categories for reasons why medication administration errors occur: medication packaging, medical facility/system, documentation error, physician-nurse relationship error, and pharmacy-based error. The goal of this Capstone Project was to highlight this issue, examine possible solutions, elevate nursing staff accountability, as well as strengthen nurse-pharmacy communication for the intended purpose of focusing on patient safety. The method used to accomplish the goals of this Capstone Project was the creation of the Medication Form. A dual signature sign off reiterates nursing accountability as well as indicates which medications were retrieved from the patient's room and how/if the medications were returned to the pharmacy or correctly disposed. Results of this Capstone Project confirm the lack of communication between the nursing staff and the pharmacy staff in regards to the use of the medication lock box and medication storage. The Medication Form was created in order to reinforce nursing accountability as well as provide an inventory log for the pharmacy, facilitate open communication between the two, and ensure patient safety.

Keywords: Medication administration errors, Nurse-pharmacy communication, Medication form, Patient safety

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Chapter 1. Introduction

Medications are a pertinent tool to assist in the care of patients within the medical system. Medications can be used to cure infections, manage diseases, and alleviate pain. The proper use of medication has a profound purpose in patient care but it is imperative for medication, its storage, its dispensation, and its interactions with other medications to be acknowledged and respected by those administering the medication. Unfortunately, once the patient has been discharged, the attention to the patient's remaining medications may take a backseat to other patients that are being actively treated. The problem of the medication lock boxes currently used on this unit is that the remaining medications are oftentimes momentarily overlooked and not discarded properly or returned to the pharmacy to be re-utilized by the facility. While this lapse in judgment may appear harmless to most, remaining medications have the potential to be grouped in with the new patient's medications. Thus, a medication error and/or unnecessary hazardous exposure may occur for either the current patient and/or the incoming patient that will occupy the room. Ultimately, patient safety is a goal that is influenced by several 'members' within the patient's team of caregivers. Individuals included in this multidisciplinary team are the physicians, registered nurses, and pharmacy personnel.

Problem Identification

In an effort to limit these potentially negative 'interactions', This author is proposing the induction of a medication log that would heighten the awareness of the nursing staff to thoroughly examine the room for any and all remaining patient medications before the next patient is admitted to the room. This simple tool would act as a reminder for nurses to gather the patient's medications and dispose of them properly.

The act of disposal extends beyond the trashcan and includes disposing of medication into the sharps container or returning the unused, undamaged medications to the pharmacy. This action would also accentuate the idea that patient care can extend beyond patient discharge.

By actively choosing which way the medications are eliminated from the patient's room, the nursing staff obtain a higher level of accountability to the patient(s) and the medical facility. This is a multi-faceted action. The previous patient's medications contain confidential patient information such as name, date of birth, and medical record number. By eliminating these confidential patient identifiers, there is a decreased risk for a HIPPA (Health Insurance Portability and Accountability Act) violation. This thorough medication sweep may also decrease the incident of a current patient receiving the wrong medication due to a previous patient's medication(s) still being in the room. On a broader scale, the act of recycling useable medications by the facility, instead of the medications being needlessly wasted, would save the medical facility revenue as well as the patient. Therefore, the goal of my proposal is to construct an easy-to-use visual aid that would facilitate nursing accountability to sweep the room for medications after a patient is discharged as well as serve as a medication-usage log that may better assist the pharmacy with medication stock counts.

This problem was identified earlier in a clinical rotation. This capstone lead observed the nurse going over discharge instructions, prescriptions, upcoming appointments, and assisting the patient with gathering of their (the patient's) personal property. The room would then be cleaned by the Housekeeping Department however the lock box in each patient room would not be cleaned out by either the nursing or

pharmacy staff. Thus, when a new patient is admitted to the room, the nurse would proceed to put the new patient's medications in the lock box where the previous patient's medications may remain. When this occurred, the previous patient's medications would be hurriedly removed and disposed of in the sharps container. However, sometimes the 'old' medications are simply moved over and the new medications were placed alongside the old medications! These actions can lead to unneeded medication waste, improper disposal, cause a lack of medication credit to the patient's account, and had the potential to lead to a medication error. The cleaning of the room should include the purging of the patient's lock box. However, there was a lack of protocol in regards to this topic/action.

Unfortunately, the attention to the lockbox fell under the 'assumed' category of patient discharge. By developing a physical medication log, the nursing staff will be reminded to clean out the lock box after the patient is discharged, thus instilling accountability of the action and a formal protocol is installed.

Patient Population

The third floor of this community facility is comprised of a medical-surgical unit and it is open 24 hours a day, 7 days a week. The unit is comprised of 18 private rooms and each room has a private bathroom. Each room has a high definition flat-screened TV and patients can access free WiFi internet access from their room. Each room consists of one hospital bed, a freestanding computer unit, a chair, a recliner chair, and a love-set sitting area that can be transformed into an additional sleeping area, and a freestanding bedside table. Storage for patients is provided in each room via built in

storage cabinets. There is also a small sink and mirror in each room that is located near the entry door of the room. There is suction located above the hospital bed. Each room also consists of a bathroom that has a sink, mirror, toilet, and walk-in shower (with handicap safety rails and emergency pull-cord). Bedside phones are also available within each room and patients are able to call locally as well as dial long distance calls as desired. Each room also has a password-secured lock box that is only accessible to the nursing/pharmacy staff. This lock box can contain pertinent patient medication. The lock box is securely mounted to the wall near the entry door.

There are two nursing stations on the unit; one at either end of the unit. Two crash carts are located on the unit as well as one bedside lift chair (500 pound capacity). There is a large family area located adjacent to a nursing station and there are also two sitting areas at the end of two separate halls. Two sets of elevators are available for use; one at either end of the unit. At each nurses station there is also a small room where fresh linens, towels, juices, and other stock is stored. A Pixis cart is also stored at each nurses station room. Each nursing station also houses one AED, one scale, four mobile pulse oximetry devices, three mobile blood pressure cuffs, as well as one large wheelchair. Four workspaces are also available with computers at each nurses station.

Purpose Statement

The securely mounted, password protected medication box is the point of contention for this Capstone Project. This Capstone Project will highlight the importance of accurately cleaning out this lockbox after a patient is discharged in order to decrease the risk of a medication administration error, account for any disposed of or returned medications to pharmacy to allow for proper pharmaceutical records, as well as decrease

the inaccurate billing of medication(s) to a patient's account, and continue to develop and strengthen the multidisciplinary team bond in reference to elevated patient safety.

Theoretical Framework

In line with Novant Medical Center's utilization of Dr. Joanne Duffy's Quality-Caring Model, I will also be using this theoretical model as the framework for my project. The Quality Caring Model "emphasizes that relationships characterized by caring contribute to positive patient, nurse, and system outcomes. This model demonstrates the value of the professional nurse supported by Evidence Based Practice of today's modern health care". The five components of the Quality-Care Model are: "Relationships and Accountability, Therapeutic Atmosphere, Patient Care Continuity, Caring Practice, and Communication" (Jenkins, 2009, p. 2).

Literature Review Framework

This Capstone Project will focus on the contribution of medication to patient care, the 'rights' of medication administration, the occurrence of medication errors, risk factors associated with medication errors, the practice of 'Do no harm', and the innovation of new technologies that have been done to limit medication errors. A Boolean search for full text journal articles and results were restricted to the 2009-2015 time frame. Databases that were searched include: PubMed, CINAHL, CINAHL Plus with Full Text, and Health Source: Nursing/Academic Edition. Key words that were conducted in my search included: medications, medication administration, seven rights of medication administration, medication errors, and safe medication administration. Several viable sources are available with each set of keyword combinations. Articles pertaining to Dr.

Joanne Duffy's Quality-Caring Model theoretical framework were also utilized in the review.

Chapter 2. Literature Review

Researchers Al-Youssif, L. Mohamed, and N. Mohamed (2013) conducted a study that focused on one particular aspect of patient safety: medication administration. The desire to focus on this aspect was driven by the impact with which medication administration has on a patient's mortality and morbidity. The purpose of the study was to identify, from a nurse's perspective, reasons why medication administration errors occur, how nurses feel about medication administration errors, and the extent to which medication administration errors are reported on a particular unit.

The study was comprised of a convenience sample of 253 nursing staff workers from a hospital. The study utilized a descriptive cross-sectional survey that included a self-reporting questionnaire that included 65 total questions. The data was gathered using the Medication Administration Errors Reporting Questionnaire tool which was then modified by the researchers. Out of the 65 total questions, 29 items were in regards to why medication errors occur, "16 items regarding reasons why medication errors were not reported and 20 items regarding what percentage of each type of medication error actually reported on units which divided into 9 items for non intravenous and 11 items for intravenous medication administration errors" (Al-Youssif, et al., 2013, p. 56).

The results of the study suggested five main categories (and mean values) for reasons why medication administration errors occur: medication packaging (63.5), medical facility/system (51.4), documentation error (47.5), physician-nurse relationship error (42.8), and pharmacy-based error (39.3).

The study discusses each of the five main categories to more thoroughly identify components that contributed to each area of error. As for the medication packaging,

these errors include, but are not limited to: misreading medication names of medical provider that is administering medication due to things such as looks-alike/sound alike medications, poor handwriting, small font size, misuse of decimal points/zeros, and other components associated with poor readability of labels such as environmental factors (noise, heat/cold, lighting, interruptions) of the administering medical provider.

The medical facility/system may unknowingly accentuate the risk of a medication administration error by the amount of workload applied to the staff as well as the type of delivery system that is established. This included the number of hours a staff member works, the nurse: patient ratio, the type of unit, nursing assignments of staff and float nurses, and rotating shifts. Documentation errors can consist of nurses not communicating with one another about a medication administration, delayed medication administration, nurses interrupting one another during medication administration, incorrect transcription of a medication in the medication administration record (MAR), as well as the lack of resources available to the nursing staff regarding a particular medication.

A physician-nurse relationship error is described by the study to include illegible physician orders for medications, poor communication between physician and nurse, equipment malfunction, no education provided regarding new medications, inadequate staff of unit, the limited knowledge of a nurse in regards to a medication, and the impossibility of all medication being passed by one nurse during a set amount of time. As for the pharmacy-based error, this is classified by the study as errors in regards to pharmacy delivering, mixing, or documenting medications incorrectly as well as the fact that pharmacists may not be available to the nursing staff 24 hours a day.

The study also identified three prominent reasons (and mean values) why medication administration errors were not reported: fear (63.8), administration reasons (50.3), and the disagreement over time and the definition of an error (36.6). In all, the study concluded that medications are a common occurrence in the clinical practice setting. Caring for a patient is a multidisciplinary tasks, especially when focusing on medication administration. Because of this, any and all medical professions linked to the administration of medication (physician, nurse, and/or pharmacist) all play a part in a patient's safety.

The reliability of this study was measured via the Cronbach's coefficient Alpha and the Scale Content Validity Index S-CVI (S-CVI) with the internal reliability results ranging from 0.785 to 0.905 and 0.99, respectively. The ANOVA F-test was utilized to analyze the means of two or more groups of the quantitative variables and the statistical significance was found to be $P < 0.05$.

Researchers Manal and Hanan (2012) conducted a study in order to better understand nurses understanding of the reasons behind medication errors, specifically the causes of medication errors, and to gain a better understanding of the nurses' perception of reporting a medication error. The study was performed using a quantitative cross-sectional descriptive design in three hospitals. Both ICU and staff floor nurses participated in the study by completing a survey. There were a total of 186 nurses that participated in the study: 115 nurses from ICU and 71 from floor units. The data obtained from the study was examined via the Modified Gladstone's Scale of Medication Errors. The theoretical framework of the study was focused on gaining a better understanding of why medication errors occur with hopes of decreasing the incident of

medication errors via highlighting staff development. The study revealed that the primary cause for medication errors in both the ICU and floor setting was when the nurse failed to check the patient's name band with the Medication Administration Record (MAR) with mean scores of 66.1% (floor nurse) and 60.6% (ICU nurse) respectively. Other reasons for medications errors included: difficulty reading physician's orders (44.3%, 42.3%), medication labeling/packaging damage (28.7%, 28.2%), confusion with two drugs with similar names (22.6%, 26.8%), nurse miscalculates the medication dose (41.7%, 49.3%), nurse administering medication was distracted by other patients, coworkers, or events on the unit/floor (34.8%, 32.4%), and nurse administering medication is tired and exhausted (29.6%. 31%).

The study also revealed that both unit floor nurses (mean average, respectively) and ICU nurses (76.5%, 67.6%) have a general perception that medication errors are not reported due to the nurse's fear of the nurse manager's reaction to a medication error. Instead, the nurse would be more inclined to notify the physician of the medication error instead. Additional significant statistical analysis were not mentioned in this study.

The researchers bring to light the significance and vitality of a multidisciplinary team and the active involvement of all parties involved in the patient's care. These parties can include the nurses, physicians, and pharmacy members. Furthermore, it is through an environment of open communication between all members of the patient's care that stimulates the highest level of care and safety for the patient.

Researchers K. Kim, Kwon, J. Kim, and Cho conducted a study from December 2009 to January 2010 that focused on gaining a better understanding of why medication errors occur from a nurses' perspective. The convenience-sample of 220 nurses that

participated in the study were from a total of seven hospitals including four teaching hospitals, two private hospitals, and one government-based hospital. The study was classified as a cross-sectional descriptive study and data was obtained via a questionnaire.

For the purpose of the study and the questionnaire, participants were asked to recall medication errors that had occurred within the last month. Each questionnaire consisted of five parts. The first section included the demographics of the study participant. This included the participant's gender, age bracket, level of education, length of time working as a Registered Nurse, and the length of time in which the participant had worked on the current unit. The second section of the questionnaire pertained to the nature in which a medication error occurred. This included the times (day/night), frequency, routes, and types of medication errors. The third section focused on contributing factors associated with medication errors such as miscommunication, personal neglect, patient factors, and environmental factors. The fourth section of the questionnaire focused on the consequences of medication errors such as "patient response, disclosure, and reporting" (Kim et al, 2011, p. 5). The fifth section of the questionnaire contained the nurses' perception on preventing medication errors.

Results of the study showed that almost two-thirds (n= total number, percentage of whole) of the participants (n=140, 63.6%) had been involved in a medication error in the last month and that medication errors occurred most frequently during intravenous medication administration (n=152, 67.2%). These researchers found that 43.3% of medication errors occurred during dayshift.

The study also concluded that the four types of medication errors included wrong dosage (n=113, 26.8%), wrong prescription (n=98, 23.3%), wrong drug administered

(n=84, 19.9%), and wrong time of medication being administered (n=77, 18.3%). For contributing factors, the study found that the most common contributing factor for medication errors was the nurses' unfamiliarity with the medication (n=100, 45.5%). As for the study information pertaining to the nurses' reporting of a medication error (n=198), no adverse effect was the most frequent outcome (n=134, 67.7%). However, minimal adverse effect (n=58, 29.3%), prolonged hospitalizations (n=2, 1%), and fetal adverse effects (n=4, 2%) did occur.

In regards to the nurses' perception of reporting medication errors (n=205), the most common reason for the lack of reporting was attributed to the nurse being fearful of being considered a troublemaker (n=86, 46.7%). The study concluded with the participants top three 'ideas' for preventing medication errors: continuous monitoring of nurses to ensure strict adherence to the '5 Rights' rule (n=135, 62.5%), Maintaining/replenishing nursing staff (n=126, 58.3%), and having nurses prepare and administer medications at the same time (n=95, 44%). Additional significant statistical analysis were not mentioned in this study.

This study highlights the elevated occurrences of medication administration errors which ultimately has the potential to compromise a patient's safety. Because of this, it is imperative to study the underlying factors associated with medication administration errors in an effort to better understand why they occur. Once a better understanding of why medication errors occur is established, this information would potentially highlight areas within the medical unit/practice that could be improved upon so that the total number of medication errors would decrease. Ultimately, the lower the incident of medication errors, a higher percentage of patient safety will be established.

Researcher Ahmad E. Aboshaiqah (2014) conducted a study in that was focused on gaining a better understanding of nurses' perception of medication administration errors. Because medication administration is a common practice for nurses within the healthcare system, an error in medication administration can negatively impact a patient. Without understanding why or how medication administration errors occur, decreasing their frequency or eradicating errors all together is less likely to take place. Thus, the study focused on contributing factors associated with medication administration errors.

The study had a descriptive, cross-sectional, correlational design and was comprised of 309 nurse study participants and 288 hospital records of medication errors were analyzed. The nurses were from two regional hospitals. The Medication Administration Error Survey was edited by the researcher and used as the data analysis tool for the study.

Data results from the study showed that a medication administration error by a nurse takes place on average (mean) of 1.4 (standard deviation (SD)=1.3) times per month. The study also found that the lack of staff education on new medications was the most frequent factor associated with a medication administration error (agreement rate (AR)=69.6%, n=215). This data was closely followed by other associated contributing factors to medication administration errors such as poor communication between physicians and nurses (AR=65.4%, n=202), physicians did not make the orders clear (AR=24.9%, n=77), and the fact that physicians changed the orders frequently (AR=23.3%, n=72).

This study highlights the prevalence of medication administration errors as well as factors that contribute to the errors. While it is important to identify these factors,

benefits from the study are not achieved until the facility/staff rectify the areas that need improvement. By taking time to communicate clearly and establish regular in-services for staff, medication administration errors may continue to occur.

Chapter 3. Methodology and Procedures

This Capstone Project focused on the nursing actions of patient care. There was no patient contact for this project, therefore IRB approval was not necessary. This was confirmed by Daria Kring, the Director of Nursing Practice, Education, and Research, and IRB coordinator for Novant Medical Center, which includes the Kernersville Medical Center. Thus, no additional contact with Daria Kring was needed in order for the Capstone Project to commence. A Medication Form was developed that will require dual nursing sign-off that signifies that a patient's room, namely the lock box, has been thoroughly examined for remaining patient medications. The format and content of the form was reviewed by the current nursing staff, the preceptor, and the Pharmacy members to ensure that it was user friendly and therefore was accepted will be integrated into the medical facility.

The practice change suggested in this Capstone Project was the future adoption and installment of a medication collection form. The goal will be for all nursing staff, day and night shift to use this form, when a patient is discharged and/or moved from a room on the unit. The form will be introduced to the nursing staff at the next staff meeting and the intent will be for it to be effective immediately. The medication form was constructed in a simplistic manner to decrease staff confusion while maintaining the innate value, purpose, and functionality of the form. The form will be available at the nurse's station. Once a patient has been discharged and/or moved from a room on the unit, the room will be correctly searched for remaining medications. The purpose of the dual nursing sign off on the medication form is to supply double verification that the room has been thoroughly searched for remaining medications as well as to provide

accountability for completing the task.

The medications found within the patient's room and lock box will be accounted for on the form and either placed in the medication return bag or properly disposed of in the sharps container. The room will be searched by another nurse and this action will be verified on the medication form. The nurse manager who will then sign off on the medication form will verify the returned medications. This chain of verification is done to allow varying level of nursing personnel and management to be aware of located medications. Once the medication form has been signed off by the nurse manager, the medication log and the medications will be given to the pharmacy department where the pharmacist will sign off on the arrival of the returned and accounted for medications. The form will ultimately be electronically scanned into the patient's chart to prove as a record of returned/disposed of medications as a formal record.

Implementation

Initial development of the Medication Form was solely based off the perceived needs of the unit by the project lead in conjunction with the expressed needs of the preceptor. The initial Medication Form layout was outlined in a similar format as to coordinate with other forms already used by the medical-surgical unit and medical facility. Appendix A represents the Medication Form that was initially designed for this Capstone Project. Once constructed, the Medication Form was reviewed by the Pharmacy as well as the preceptor. Analysis was done to check for form simplicity as well as ensuring that the form provided accurate medication logging capabilities. In order to streamline the form, the preceptor suggested that the name and room number of the patient should be removed from the form since a patient label was already required on

the form and the patient label would already contain the patient's name and room number. Furthermore, the preceptor suggested that the 'Nurse #1' and 'Nurse #2' should be removed and replaced with 'Witness #1' and 'Witness #2'.

In conjunction with these suggestions, the changes were made to the Medication Form and are displayed in Appendix B. Overall, these changes were done in order to eliminate redundant information as well as shorten the time it would take the Registered Nurse to complete the form.

After the construction of the revised Medication form, it was again reviewed by the preceptor (nurse manger) and pharmacy. Both groups were in agreement that the form was thorough and user-friendly as well as provided adequate documentation for medication returns and proper disposal of non-returnable medication. To date, because the Medication Form is not yet being utilized by the Facility (but may be used in the future), there is no input from the nursing staff.

Chapter 4. Results

Results of this Capstone Project are multidimensional in nature and impact the medical field and local medical facility on a multidisciplinary level. This project highlighted the importance of a multidisciplinary team approach when caring for patients and the action of medication administration. This teamwork is achieved by an active collaboration of the nursing staff, pharmacy, and the physicians. The final result of this capstone is the construction of the medication form, which will also serve as an inventory log for the pharmacy department. While physicians will continue to order the needed medications for patients to treat diagnoses, the nursing staff will have an elevated sense of awareness when it comes to proper medication storage and dispensation. Although the action of collecting miscellaneous medications from the patient's lock box (and room) after a discharge, the potential for a medication administration error is heightened when said medications are erroneously kept in a patient's room.

Further results of the installment of the medication log may be more visible and substantial once a follow-up audit is completed. It is suspected that the results of the follow up audit will indicate a higher level of accountability for the nursing staff in regards to medication storage, a decreased amount of medication surplus being found in a patient's room after a discharge and/or move to an alternate room, and a more accurate level of medication stock records within the pharmacy department. These predicted findings substantiate the importance of adopting the medication log into the routine of the nursing staff and medical facility.

In conjunction with the more apparent results of the instillation of the medication log, it also became evident during the review, research, and project foundation phase that

there is currently an unawareness of the lack of communication between the nursing staff and the pharmacists. Initial research into this issue proved that the nursing staff was storing varying types of medication within the lock box. Current facility protocol indicates that the lock boxes are to only contain medications that are due at the next medication pass. However, nursing staff have been utilizing the lock box to store a myriad of patient medications due to convenience of the medication lock box with the added safety of the passcode required entry into the lock box. This miscommunication was not apparent to the pharmacy staff. With this finding, the communication between the nursing staff and the pharmacist has become more open and staff education has been reinforced on the proper usage of the patient's lock box.

Chapter 5. Discussion

"Prescription medication use is widespread, complex, and increasingly risky.... and nearly one-third of adults in the United States take five or more medications" (Agency for Healthcare Research and Quality, 2015). In the "acute care setting, nurses spend a great deal of time administering medications" but this process of medication administration "also involves doctors and pharmacists." "In giving medications, some untoward incident may happen and medication errors may occur" which may compromise patient safety (Manal & Hanan, 2012, p. 1). Unfortunately, "medication errors represent the largest single cause of errors in the hospital setting" and "Institute of Medicine reported that, 44,000 to 98,000 people die in hospitals annually as a result of medical errors and its rates can be as high as 1.9 (medical errors) per patient per day" (Manal & Hanan, 2012, p.1).

As with all components of healthcare, "patient safety is a concern worldwide and is a significant challenge facing healthcare systems today" (Al-Youssif, S., Mohamen, L., Mohamed, N., 2013, p. 56). "Among patient safety issues, medication safety has been considered as a major indicator of health-care quality" (Kim, K., Kwon, S., Kim, J., Cho, S., 2011, N.P.). "Medication errors are a serious public health threat, causing patient injury, death, and sharply increasing health care costs" (Al-Youssif, S., Mohamed, L., Mohamed, N., 2013, p. 56). A "medication error is defined as any type of error in the prescription, transcription, dispensation, and administration process..." (Manal & Hanan, 2012, p.1). Besides the potential physical-damage component of medication error, the financial repercussions to the healthcare facility and/or patient can be substantial. "Patient stays associated with medication errors also increased by 4.6 days, with a

resulting cost increase of \$4,685 per patient" (Manal & Hanan, 2012, p. 1).

Medication administration errors "are often used as indicators of patient safety in hospitals because of their common occurrence and potential risk of patient" (Al-Youssif, S., Mohamed, L., Mohamed, N, 2013, p. 57). While the interception of medication errors can occur at any time, the greatest risk for a medication error to go undetected is during administration because there are "fewer system checks" as opposed to the early stages of medication processing (prescription and preparation). "Because nurses administer most medications to patients in hospitals, medication errors can be directly affected by nursing care". "In the acute care setting of a hospital, the medication process is complex and time-consuming, occupying up to one-third of the nurses time. Medication administration is often carried out under chaotic and stressful circumstances and is probably the highest risk activity a nurse performs" (Al-Youssif, S., Mohamed, L., Mohamed, N, 2013, p. 57).

In an effort to curb medication errors, the nine rights of medication administration was developed. The nine rights of medication administration are: "right patient, right drug, right route, right time, right dose, right documentation, right action, right form, and right response" (Elliott, M. & Liu, Y., 2010, p. 301). "Research has shown that as many as one third of medication errors involved the patient being given the wrong medication" (Elliott, M. & Liu, Y., 2010, p. 301) and a factor contributing to medication errors may be "poor medication labeling...and lack of verification" (Elliott, M. & Liu, Y., 2010, p. 300). Without medications being properly labeled and possessing patient identification for added medication administration safety, the risk for a medication error is heightened. However, healthcare systems are aware of the prevalence of

medication errors and many are utilizing automatic dispensing machines for medications as well as electronic medical record systems that possess the ability to 'know' what medicines are 'supposed' to be administered to the patient. The automatic dispensing machines for medications also allow the pharmacy to track the administration of drugs for each patient, which assists with patient billing of medications (Fung, E & Leung, B., 2009). Without correct billing being established, the healthcare facility may not be adequately reimbursed for the medication administration, thus negatively financially impacting the healthcare facility and insurance provider.

Conclusion

This Capstone Project has highlighted the prevalence and statistical significance that medication errors have on patient safety. The members of the multidisciplinary team that are caring for the patient directly impact facilitating a safe environment to a patient. These members include, but are not limited to, the physicians, Pharmacy, and the nursing staff. In an effort to reinforce work place accountability by the nursing staff in regards to medications as well as stimulate a safe environment, the Medication Form was created. By utilizing the Medication Form, excess medications are quickly returned to the pharmacy, the patient room is cleared of a previous patient's medication thus reducing the risk for a medication error, the pharmacy can maintain more accurate medication stock numbers, and the patient's account is adjusted when dispensed medications are returned to the pharmacy.

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Appendix A

Patient Label Here

Medication Collection Form

Patient Name: _____
Room #: _____
Date of Discharge: _____
Time of Room Inspection: _____

Medication Log

Table with 4 columns: Name of Medication, Dose, Quantity, Circle One: Sharps/Return to Pharmacy. Rows 1-5.

Nurse #1: _____ Date/Time: _____
Nurse #2: _____ Date/Time: _____

Supervisor signature: _____ Date/Time: _____

Pharmacy acknowledgement: _____ Date/Time: _____

Comments: _____



Patient Label Here

Appendix B

Medication Collection Form

Date of Discharge: _____

Time of Room Inspection: _____

Medication Log

Name of Medication	Dose	Quantity	Circle One: Sharps/Return to Pharmacy
1.			Sharps/Return to Pharmacy
2.			Sharps/Return to Pharmacy
3.			Sharps/Return to Pharmacy
4.			Sharps/Return to Pharmacy
5.			Sharps/Return to Pharmacy

Witness#1: _____ Date/Time: _____

Witness #2: _____ Date/Time: _____

Supervisor signature: _____ Date/Time: _____

Pharmacy acknowledgement: _____ Date/Time: _____

Comments: _____

