

Winter 12-12-2014

INCREASED COMMUNICATION BETWEEN NURSES AND DOCTORS ON AN ACUTE MEDICAL UNIT

Nina Linebarger
ninamarie211@yahoo.com

Follow this and additional works at: <https://repository.usfca.edu/capstone>

Recommended Citation

Linebarger, Nina, "INCREASED COMMUNICATION BETWEEN NURSES AND DOCTORS ON AN ACUTE MEDICAL UNIT" (2014). *Master's Projects and Capstones*. 83.
<https://repository.usfca.edu/capstone/83>

This Project/Capstone is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.

Increased Communication Between Nurses and Doctors on an Acute Medical Unit

Nina Linebarger

University of San Francisco, Nursing

Abstract

Background: Nurse-physician rounding is crucial to safe, effective care and to maintain open communication between the multidisciplinary healthcare team. Currently there is no protocol that encourages nurses to attend physician rounds. The lack of nurse-physician rounding is a potential area for medical error due to lack of communication and collaboration among the healthcare team.

Purpose: The focus of this study is to increase communication between the nurses and doctors on an acute medical unit by increasing nurse attendance and participation at physician rounds.

Methodology: Surveys were a key component in the methodology of this project. Surveys were distributed to the entire RN staff on the acute medical unit prior to implementing a structured rounding process. Surveys were also distributed post-implementation.

Results: Post survey results indicated that of those who responded, 58% agreed or strongly agreed that communication with the attending physician(s) and teams increased. The remaining 42% neither agreed nor disagreed. 50% of the nurses worked at least 3 shifts within the past week. When asked if the nurses feel less likely to page the physician(s) when they attend physician rounds, 75% chose no.

Conclusion: Results confirm that nurse-physician rounding increases communication between the nurses and doctors. Attendance and communication has increased since the team rounds have been implemented, however paging the physician is still a part of care that occurs on a regular basis.

Statement of the Problem

Currently, as gathered from both empirical data and surveys, nurses are unaware when the physicians begin rounding on the acute medical unit. According to the current management on the acute medical unit, most physicians do not notify the nursing team when they round. Consequently, nurse and physicians are not rounding together. According to Lyons et al (2013), nurses should attend physician bedside rounds. Bedside rounding is a historical clinical model that brings together care providers and the patient to discuss the plan of care (Lyons et al, 2013). Interprofessional clinical rounding involves multiple health profession teams to provide patient care. The focus of this study was to increase communication between the nurses and doctors on an acute medical unit by increasing nurse attendance and participation at physician rounds. Barriers to nurses attending physician rounds were assessed through surveys, and an intervention based upon the findings was implemented.

Nurses and doctors should carry out the unit patient rounds together. Although this solution may be simple in theory, it is not always easy to implement. Having commitment to specific unit rounding times is difficult for many staff and, until the benefits are recognized by all, it will continue to be difficult to resolve. However, “overcoming any problems is best overcome through effective leadership, which is an essential requirement for the implementation of any change” (Moroney & Knowles, 2006).

Professional conversations between physicians and nurses are the foundation for effective and safe patient care. However, nurse attendance on rounds seems to be the exception rather than the rule (Needleman et al., 2011). If nurses are not present on physician rounds, this may

lead to miscommunication to patients and relatives because of the misunderstanding of the clinical decisions of the physician (Desai, 2007). Research on continuity of care and patient safety consistently finds communication and teamwork as leading barriers (Donchin et al., 2003; IOM, 2004; LifeWings, 2005; Morath & Turnbull, 2005).

In order to provide high quality, safe health care, effective communication is crucial. Some benefits of communication between nurses and physicians are that it prevents costly errors and also streamlines patient care to prevent any possible delays. As addressed, effective communication does not always take place. Some research suggests that communication breakdown may originate from the pre-licensure education received for both the physician and nurses. Each role's education emphasizes their individual roles in patient care. This may cause a misunderstanding of what each profession contributes to the healthcare team (Flicek, 2012).

According to Lewin & Reeves (2011), both doctors and nurses regard rounds as a vital mechanism for doctor-nurse communication. Both doctors and nurses noted that nurses would join these rounds on occasion, although, in general, such attendance was rare. Some reasons for nurses not attending rounds included work pressures, the high number of medical teams working on each unit and the unpredictable timing of these rounds throughout the day, often with two or more medical teams separately, but simultaneously, performing rounds (Lewin & Reeves, 2011).

Rationale

According to current protocol on the acute medical unit, there is no policy in place that enforces, encourages, or notifies nurses to attend physician rounds. The lack of nurse-physician rounding is a potential area for medical error due to lack of communication and collaboration

among the healthcare team. According to the Institute of Medicine (IOM), 44,000 to 98,000 deaths occur annually as a result of medical errors. These medical errors can cost hospitals over \$29 billion each year and are the fifth leading cause of death in the United States. The IOM (2000) specified that research has found that these errors are due to a breakdown in the system's processes (Edwards, 2008). These errors may potentially be avoided by streamlining interdisciplinary communication and collaboration.

Collaboration has been defined as an interaction between the physician and nurse that "enables the knowledge and skills of both professionals to synergistically influence the patient care being provided" (Weiss, 1985). The US National Council of State Boards of Nursing (NCSBN) states that "collaboration is a professional imperative" (NCSBN, 2002). According to Donchin et al., 2003, "a key element to successful interdisciplinary care is open communication between and among disciplines as well as collaborative teamwork." Much research supports the importance of rounding and the communication that takes place during them. According to Busby and Gilchrist (1992), "rounds may potentially be one of the most valuable times for sharing information, problem solving, and planning treatment," both for the professional and the patient. Rounds are acknowledged as a valuable time for health care professionals to come together in an effort to develop an integrated, and patient-centered, plan of care. According to Falise (2007), interdisciplinary rounds are a strategy that can improve communication, collaboration, and professionalism as well as patient outcomes.

Several reviewed studies found that physicians and nurses valued collaboration (Hughes & Fitzpatrick, 2010; Robinson et al. 2010; Rosenstein 2002). Both nurses and physicians agreed that effective collaboration is imperative to provide better quality patient care, which ultimately

leads to improved patient health outcomes. Effective communication is vital to maintain quality working relationships between physicians and nurses, and it also ensures that patient care is delivered correctly and timely (Sirota, 2007). The goals of nurse-physician rounding, according to Felten et al (2007), “are to enhance quality of patient care, share information, address patient problems, plan and evaluate treatment, and increase learning opportunities for staff.”

Literature Review

Research studies have been conducted to signify the importance of nurse physician rounding on an acute medical unit. According to Edwards (2008), team rounds create an environment that gives all disciplines a time to voice their opinions and concerns and facilitates more frequent and effective communication. Consequently, there is improved patient safety through more accurate information transfer, more efficient use of time and resources, and a decrease in medical errors. Communication among the patient, physician, and nurse individualizes and improves patient care. When nurses and patients are able to physically hear the physician's plan of care at the bedside, the risk of error and potential misunderstanding decrease (Casanova et al., 2007). A collaborative approach to patient rounds and patient care will not only improve communication, reduce errors, and increase health care provider efficiency, but will also improve the patient's perception of care. Literature suggests use of nurse-physician collaborative rounds to provide a positive effect (Buerger, 2007). Nurses, patients, and physicians would ideally be able to get their questions answered during these rounds, thus decreasing the need for paging and calling after the physician left the unit (Burns, 2011).

In one study, an advanced practice nurse (APN) led an interdisciplinary team of physicians and nurses through the development of a new rounding process. The purpose of the project was to improve patient safety by improving communication. The goals of the new

rounding process were to promote an expected, structured time for participation in rounds by nurses. It was also intended to promote nurses' communication and collaboration as unique contributions to the care of patients. After implementing the new rounding process, nurses' participation in rounds increased by 19%. Nurses' reporting of important overnight events increased 57%. The identification of discrepancies in physician orders by nurses increased by 26% (Licata et al, 2013). This study proves the significance of having a rounding process in place in order to increase nurse attendance at rounds and communication between the disciplines.

Effective collaboration and teamwork is essential to providing safe hospital care. A study performed by Sehgal and Auerbach (2011) was done to assess the intervention's effect intended to improve interdisciplinary collaboration and decrease adverse events (AEs). Several important and unique barriers to communication among health care professionals exist, including the large size of teams, team members typically care for multiple patients simultaneously and work in shifts or rotations resulting in lack of continuity of care, as seen on the acute medical unit. Research has shown that nurses and physicians in patient care units do not communicate consistently (Evanoff et al, 2005). In the study performed by Sehgal and Auerbach (2011), the intervention of Structured Inter-Disciplinary Rounds (SIDR) took place each week at 11am in the unit nursing report room and lasted 30 to 40 minutes. The nurse manager and a unit medical director both facilitated the daily rounds. Every nurse and resident physician on the unit were expected to attend SIRD, as well as the pharmacist, social worker, and case manager assigned to the unit. SIDR significantly reduced the adjusted rate of AEs in a medical teaching unit.

Mandatory bedside rounds have been shown to promote effective communication, creating greater satisfaction for the patient and health care team members. According to Burns (2011), "increased satisfaction occurs because physicians, nurses and patients participating in bedside

rounds receive the same information to accomplish their tasks and meet patient care goals.”

Including patients and their families in bedside rounds provides opportunities for discussion among them and the healthcare team. This reduces the possibility of any miscommunication and allows patients to become involved in their plan of care. In this study, when physicians from the medicine team arrive at a patient's room, they page the primary RN to attend beside rounds. Barriers to effective use of this model include the availability of the nurse and high patient acuity. Additionally, change frequently occurs in physician residents who staff the medicine service, and new residents are often unaccustomed to the unit and its policies. The solution to ineffective communication on the unit is to start doing required, interdisciplinary bedside rounds. According to Burns (2011), mandatory beside rounds “reduce errors and lead to more efficient patient care.” This process also allows patients to see effective communication among the health care team, which may cause them to feel more confident in their received care and greater satisfaction from the hospital experience. A strategy must be identified to facilitate nurses' consistent involvement in the mandatory bedside rounds (Flicek, 2012).

The literature supports that interdisciplinary rounds directly cause an enhancement in communication, collaboration, and patient outcomes. The goal of rounds is to discuss every patient, every day. The rounding process at the hospital in Miami was initially created to increase patient safety and compliance with published guidelines. However, what occurred was a large increase in alignment with evidence-based care recommendations and amicable relationships among the healthcare team members. In addition, it caused the entire division to look for errors and safety challenges prior to them even occurring. Professionalism and respect among healthcare team members also increased. Patients receive the skillful, trusting, and complete care that they deserve. Staff benefits from the educational opportunities and critical

thinking challenges suggested by the team, and the healthcare system gains a safer, more cohesive, and respectful practice environment. (Falise, 2007).

Hojat et al (2003) performed a cross-cultural study to compare attitude toward collaboration between 2522 physicians and nurses from USA, Mexico, Israel and Italy. The study conveyed that despite differences in culture, nurses displayed a more positive attitude than physicians toward the importance of collaboration (Hojat et al. 2003). These different perceptions on the importance of physician-nurse collaboration are potentially due to the different training nurses and physicians receive, as mentioned earlier. They may also adopt different care philosophies (Hughes & Fitzpatrick 2010; Sirota 2007). While physicians were traditionally taught to develop technical skills and focus on finding cure for diseases, nurses were trained in developing interpersonal skills. Nurses provide holistic care for patients and make decisions interdependently with physicians (Hughes & Fitzpatrick 2010; Sirota 2007).

Two intervention studies explored the effectiveness of interdisciplinary unit rounds in medical units in different parts of the United States (Burns 2011; Vazirani et al. 2005). Both studies supported the effectiveness of daily rounds in improving the quality of patient care and nurse-physician communication. With effective team rounds, communicating essential information could be done in person and reduce the need for phone calls to clarify doubts (Burns 2011; Vazirani et al. 2005).

Nurse-physician rounding has been shown to potentially improve communication, collaboration, professionalism and patient outcomes. The basis of interdisciplinary rounds is the interdisciplinary communication, shared planning and decision-making. Key elements include collegiality, respect and trust in a supportive, education-focused environment. (Falise, 2007).

Root cause analysis

A root cause analysis was performed to determine if nurses were currently attending physician rounds on their assigned shifts; and if not, the reason as to why they were not attending. An anonymous, online Survey Monkey was distributed to all 30 staff registered nurses on the acute medical unit. The staff nurses were asked if they attended physician rounds. If not, they were to choose from one of the six major barriers to not attending physician rounds, including: in another patient's room, did not know physician was rounding, too busy, rounding with another medical team, or isn't important. See Figure 1 below.

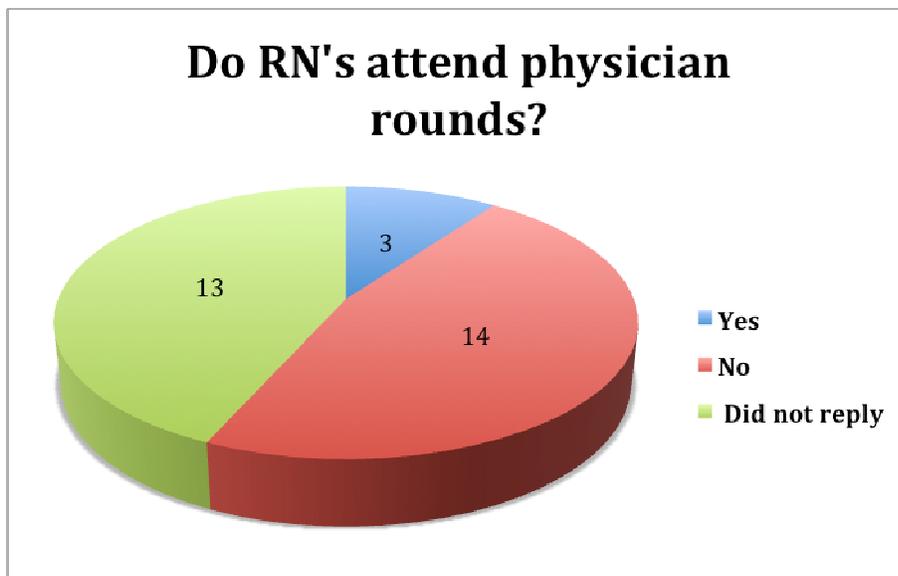


Figure 1. Number of RN's who attend physician rounds.

Out of the 30 RN staff on the unit, 17 responses were gathered via the online, anonymous survey system.

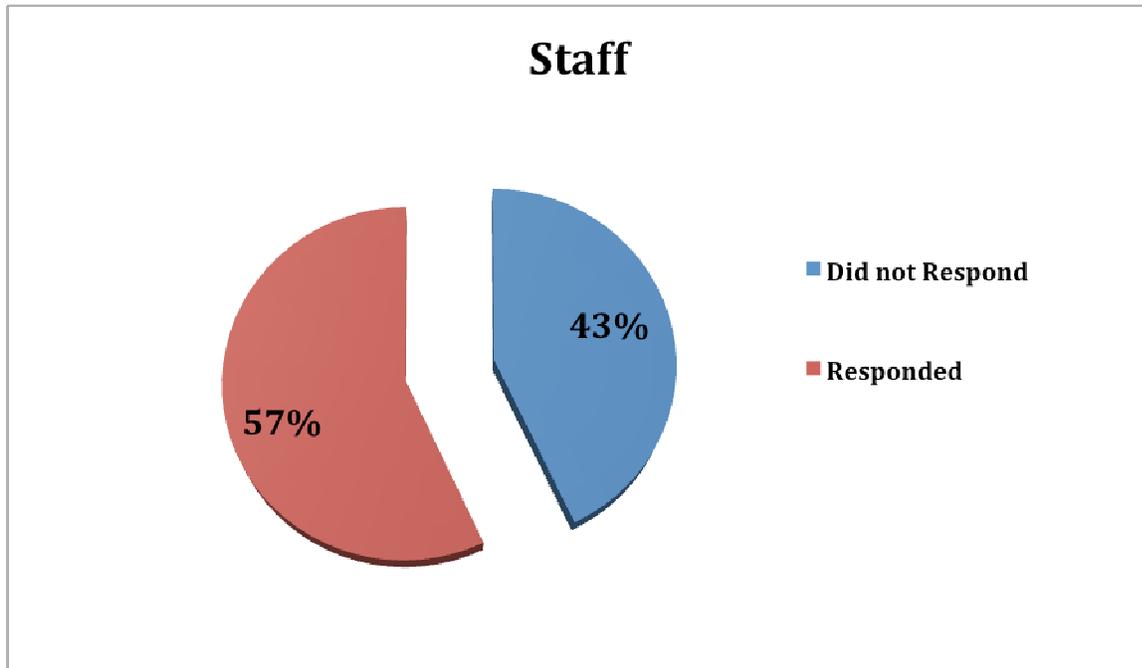


Figure 2. Staff pre-implementation survey response.

After reviewing the pre-implementation survey results, the majority of nurses did not attend physician rounds. The main barrier to not attending physician rounds was the nurse's lack of knowledge that the physician was rounding. The first question was, "Do you currently attend physician rounds on your assigned shifts?" Three nurses, 17.65%, responded yes; fourteen nurses, 82.35%, responded no. Figure 2 illustrates these findings.

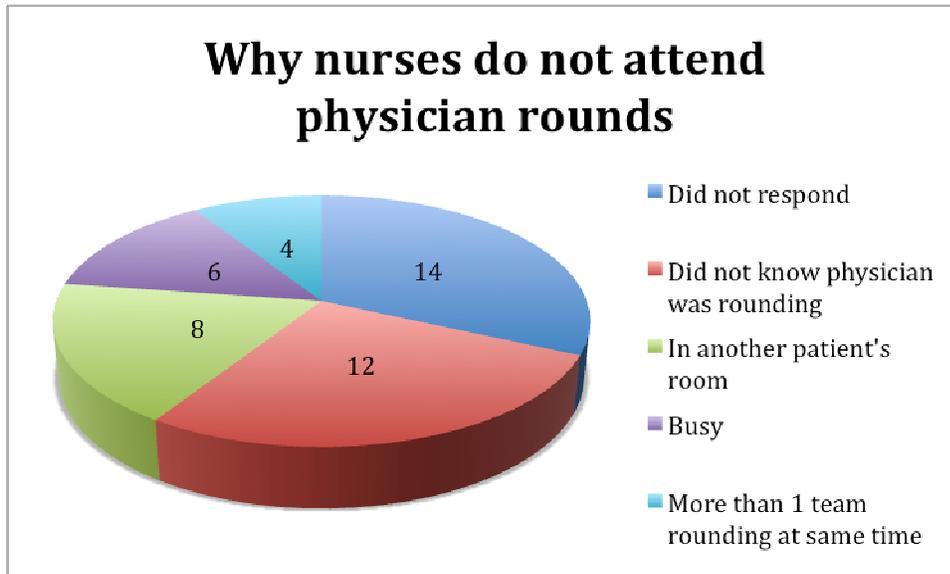


Figure 3. Barriers identified for not attending MD rounds.

The second question was, “If no, why don’t you attend physician rounds?” Sixteen responses were gathered: The majority of nurses, twelve nurses or 75%, chose that they “didn’t know physician was rounding”; eight nurses, or 50%, chose “In another patient’s room”; six nurses, 37.5%, chose “busy”; four nurses, 25%, chose “More than 1 team rounding at same time”; and none of the nurses chose that rounding “isn’t important”.

Cost Analysis

The change implemented on the acute medical unit did not increase any costs. Existing staff and resources that are available on the unit were used to implement the change. Physicians were ideally expected to save time from receiving pages and calls by allowing the nurse and patient to ask questions directly face-to-face, however results showed this was not the case. There should be no gaps in treatment and communication because of the ability of the nurse and physician to communicate face-to-face. This interprofessional collaboration allowed the unit to

run more smoothly due to effective and transparent communication during the daily nurse physician rounds.

Attending rounds in teaching hospitals around the United States have dramatically changed and evolved in the past few decades, including a shift from the bedside to conference rooms and hallways. (Stickrath et al, 2013). The author's original proposed implementation was to have the physician check in with the unit secretary at the beginning of his/her rounds to alert the nurse caring for the patient to come to the bedside if available. If he/she was not available, the charge nurse could potentially attend the bedside rounds. Prior to my implementation, unit management proposed and organized daily rounds at the patient white board in the hallway near the nurses station, Monday through Friday, from 10:00-11:00am. The purpose of these rounds was to expedite discharge and facilitate more open communication among team members. The entire healthcare team was and still is expected to attend, including the attending physician, case manager, physical therapy/occupational therapy, the charge nurse, and the bedside nurse. For some patients, the social worker, registered dietician, and pharmacist attend the rounds as well. In this system, each team is allocated seven-minute time slots. For example, team C is given 7 minutes from 10:00-10:07, team B is given from 10:08-1015, etc. (See appendix B)

The staff nurse was and still is expected to communicate team rounds information to the patient and family prior to team rounds. The goal of discharge is before noon, so the nurse must be proactive in asking the patient and/or family to make arrangements for discharge at the expected time frame and to confirm the transportation. The nurse is also expected to address any concerns about the overall plan of care and if they need help at home and discuss barriers or issues the patient may have prior to discharge. They must also update the patient care board in

the room with the plan, estimated discharge date, and time range if known. During team rounds, the nurse must bring up patient and/or family concerns when prompted by the Case Manager. According to Press-Ganey data, in November 2013, 7.38% of discharges were before noon.

Methodology

After noticing and observing the lack of nurses' attendance at physician rounds, the author wanted to first examine the reason as to why they are not attending. Surveys were a key component in the methodology of this project. It was important to gain a better understanding from the frontline staff nurses in order to develop an effective change on the acute medical unit. The surveys revealed important information as to why nurses were not attending physician rounds on the unit. The author has also gotten help and input from the Patient Care Manager, Unit Educators and the three Assistant Patient Care Manager on the unit. The author has also contacted a Stanford student on the Resident Safety Council who is also working on improving RN-MD communication. After the physicians are on board, increasing nurse attendance at physician rounds will immediately take effect and evaluation will occur for two weeks after.

Data Source

To be able to obtain data about the barriers of attending physician rounds, the author surveyed the RNs on the unit (Appendix A). The surveys had the nurses address the main barrier as to why they were not attending physician rounds on their assigned shift(s). The author also assessed the nurses post-implementation to gather information regarding if their communication with the attending physician(s) increased, how many times they attended rounds within the past week on his/her assigned shifts, and if they feel less of a need to page the doctor if they attend the rounds (Appendix C).

Results

The expected results of this project ultimately include an increase in communication between nurses and physicians and to also increase attendance at physician rounds. This was measured by the post-assessment surveys distributed to the staff nurses. The physicians, nurses, and entire health care team needed to be punctual and compliant in order for the new rounding process to be effective.

Conducting team rounds in front of the nurses' station was just beginning to be piloted on the acute medical unit, as well as two other units in the hospital. There was no current policy in place to make nurse-physician rounding mandatory on this unit. The expectation was that the bedside RN participated in these rounds to voice concerns on behalf of their patients and to relay information from the physicians back to patients within a short time frame. As the author mentioned, the proposed implementation was to have bedside rounding in the patient room. However, the staff voiced concern about sitting down in the patient room when assigned isolation patients. The act of sitting down in a patient's room had infection control concerns, according to the unit educator, which were barriers to implementing the proposed, mandatory bedside nurse-physician rounding. The unit educator does not sit on furniture in isolation rooms, even with proper personal protective equipment (PPE) and a gown. In a survey performed on this unit, only 35% of the staff nurses viewed sitting down with patients as extremely important (Malouf, 2014). Another nurse expressed that there are social and cultural concerns involved with sitting down in a patient's room, and should only be done with consent. These are additional barriers and issues to having bedside rounding.

Out of the 30 registered nurses on the unit, only 12 responded to their post-implementation survey. This is a 40% return rate, which is considered good.

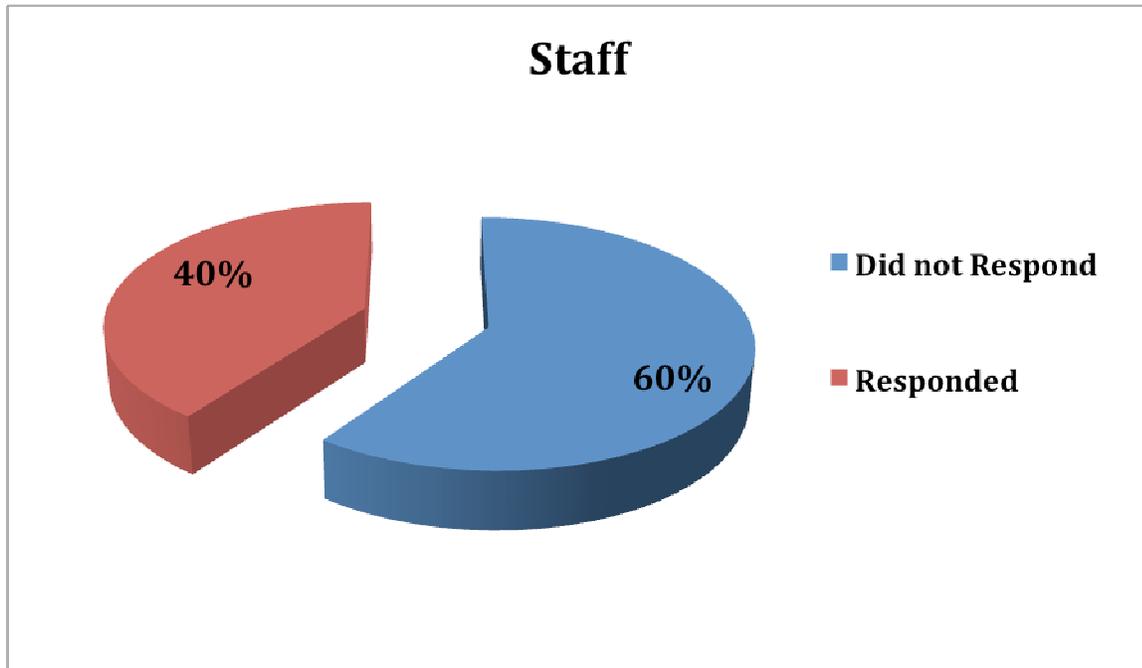


Figure 4: Staff post-implementation survey response.

Question 1: Has your communication with the attending physician(s) and/or his/her team increased? (Since Team Rounds has been implemented) On a Likert scale on 1-5, 1 being disagree and 5 being agree, zero nurses chose 1 and 2, 5 nurses chose 3 (41.67%), 6 nurses chose 4 (50.00%), and 1 nurse chose 5 (8.33%).

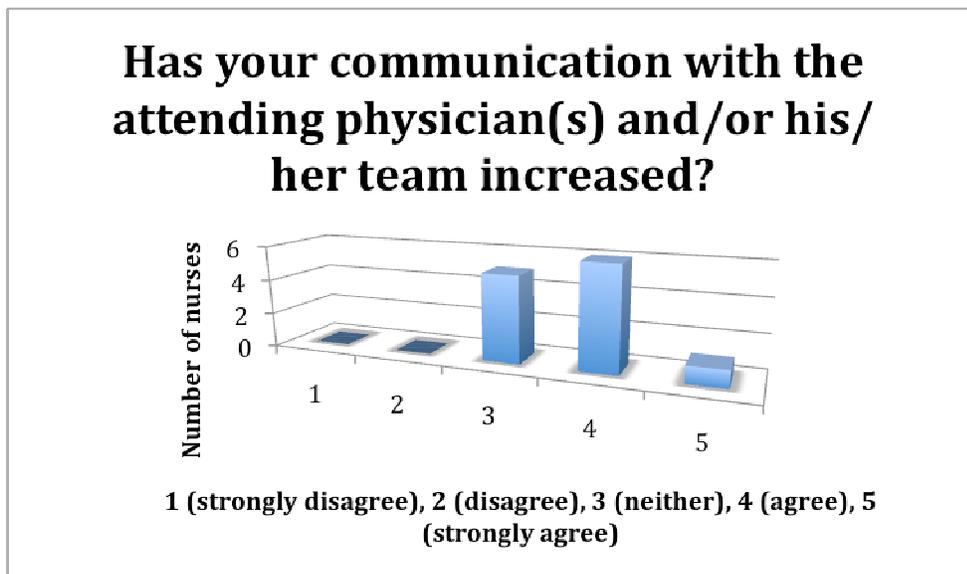


Figure 5. Increased communication post-implementation.

The second question: How many times have you worked in the past week? Out of 12 floor nurses on a scale of 0-7, zero nurses chose the option of working 0, 4, 6 or 7 shifts within a week. 1 nurse chose 1 (16.67%), 2 nurses chose 2 (16.67%), 6 nurses chose 3 (50.00%), and 2 nurses chose 5 (16.67%).



Figure 6. Staff nurse shifts within week.

Question 3: How many times have you attended physician rounds in the last week? On a Likert scale from 0 through 7, two nurses chose 0 (16.67%), 5 nurses chose 1 (41.67%), two nurses chose 2 (16.67%), one nurse chose 3 (8.33%), 1 nurse chose 4 (8.33%), 1 nurse chose 5 (8.33%), and zero nurses chose 6 or 7 (0%).

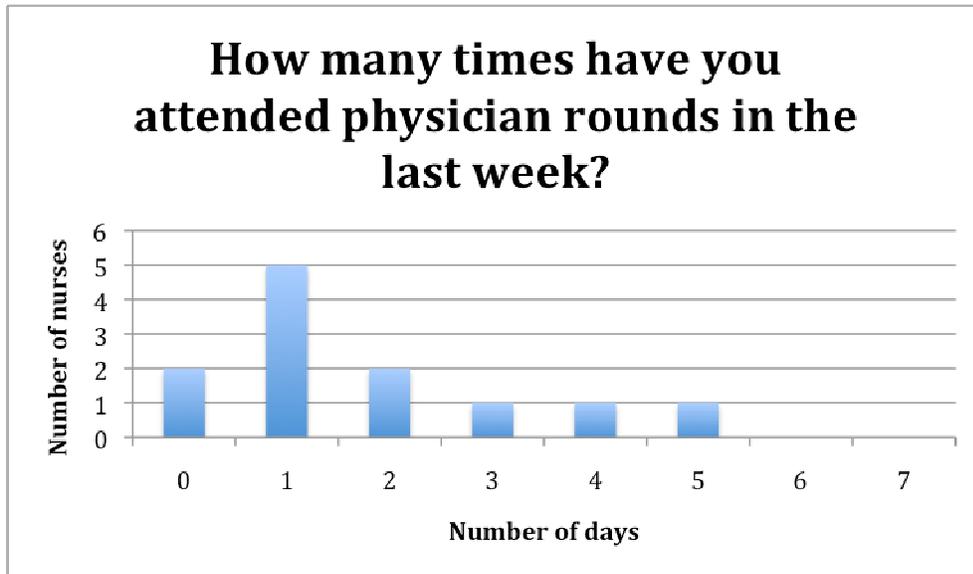


Figure 7. Nurse attendance at physician rounds within a week.

Question 4: I feel I am less likely to page MD/team when I attend physician rounds. 3 nurses chose yes (25%) and nine nurses chose no (75%).

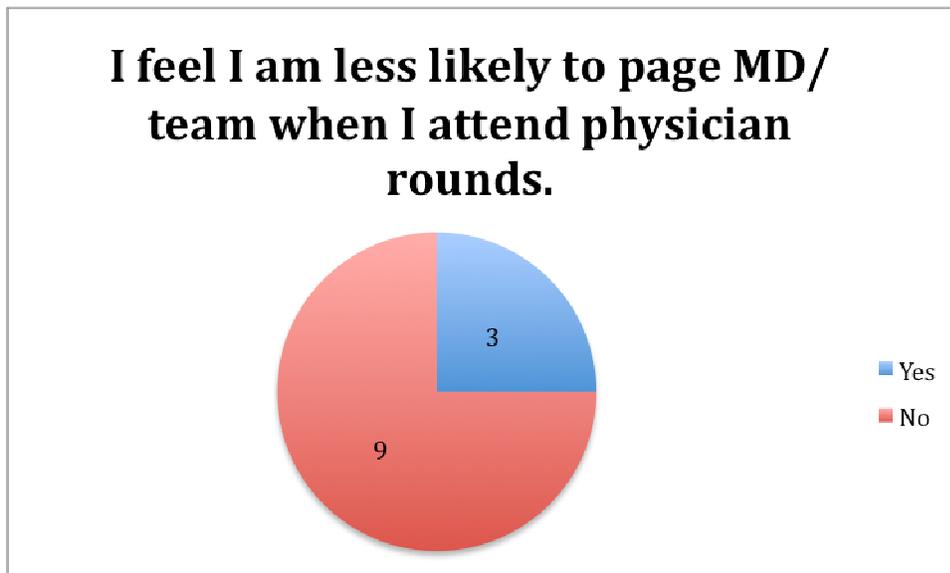


Figure 8. Nurse felt less likely to page physician if attended physician rounds.

Nursing Relevance

The project will contribute to our understanding as nurses in the importance of patient-centered care, interdisciplinary collaboration and communication in the healthcare setting. It

demonstrates the importance of the frontline staff nurses and physicians to work in collaboration to provide high quality patient-centered care to involve them in the plan of care that can ultimately increase patient care outcomes. Results confirm that nurse-physician rounding is imperative to increase communication between the nurses and doctors. Attendance and communication has improved since the team rounds have been implemented, however paging the physician is still a part of care that occurs on a regular basis.

Some limitations exist in this study, including the numerous admitting teams and physician. On the acute medical unit, 60% of the admitting teams are from the Medicine teams, and there are 10 Medicine teams total. In addition, rotations change every Monday for residents and every 2 months for interns, which necessitates constant teaching and reminder on a weekly basis to make sure the entire team is able to attend the rounds. Since initially the implementation was to have bedside rounding, the author had a difficult time deciding which admitting team would be best to meet with, since not one has a majority of the patients. According to some present staff, there are infection control concerns and time constraints for doing the initial bedside rounding. According to Press-Ganey data released in August, 90.7% of patients said that nurses kept them informed, which is 0.9% below the 91.6% target. More recent data since the team rounds have begun has not yet been released. According to Press-Ganey data October 8, 2014, 91.7% of patients on the unit agreed that staff worked together to care for you. This percentage slightly increased to 92.2% as of November 12, 2014. In regards to staff including the patient in regards to treatment, 89.1% responded yes in October, and 89.3% responded yes in November. This may be due to the implementation of team rounds.

After the author completed this study, there was a structured plan in place for sustaining and maintaining the change. The attending physician, the case manager, physical therapy,

occupational therapy, rehabilitation, nutrition, the charge nurse and the bedside nurse were all on board and it has been running smoothly for a month (since October 20, 2014). Weekend unit rounds are scheduled to go live in 2015. This will further increase communication and the continuity of care.

Bibliography

- Burns, K. (2011). Professional Issues. Nurse-Physician Rounds: A Collaborative Approach To Improving Communication, Efficiencies, and Perception of Care. *MEDSURG Nursing*, 20(4), 194-199. Retrieved from: <http://0-search.ebscohost.com/ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2011244875&site=ehost-live&scope=site>
- Busby, A., & Gilchrist, B. (1992). The role of the nurse in the medical ward round. *Journal Of Advanced Nursing*, 17(3), 339-346. doi:10.1111/j.1365-2648.1992.tb01912.x
Retrieved from: <http://0-search.ebscohost.com/ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=1992142268&site=ehost-live&scope=site>
- Desai, T., Caldwell, G., & Herring, R. (2011). Initiative to change ward culture results in better patient care. *Nursing Management - UK*, 18(4), 32-35. Retrieved from: <http://0-search.ebscohost.com/ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2011203343&site=ehost-live&scope=site>
- Edwards, C. (2008). Using interdisciplinary share governance and patient rounds to increase patient safety. *MEDSURG Nursing*, 17(4), 255-257. Retrieved from: <http://0-search.ebscohost.com/ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2010006682&site=ehost-live&scope=site>
- Evanoff, B., Potter, B., Wolf, G., Grayson, D., Dunagan, C., Boxerman, S. Can we talk? priorities for patient care differed among health care providers. In: Hensrick K, Battles

JB, Marks ES, Lewin DI, eds. *Advances in patient safety: From Research to Implementation*. Vol 1. AHRQ publication 05-0021-1. Rockville, MD: Agency for Healthcare Research and Quality; February 2005: 5-14.

Falise, J. (2007). Creating a healthy workplace. True collaboration: interdisciplinary rounds in nonteaching hospitals -- it can be done!. *AACN Advanced Critical Care*, 18(4), 346-351.
<http://0-search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2>

Flicek, C. (2012). Communication: a dynamic between nurses and physicians. *Medsurg nursing*. Vol 21: 6. p 385-386.

Institute of Medicine (2001). *Crossing the quality chasm: a new health system for the 21st century*. Washington: National Academics Press.

Lewin, S., Reeves, S. (2011). Enacting 'team' and 'teamwork': Using Goffman's theory of impression management to illuminate interprofessional practice on hospital wards. *Social Science and Medicine*. Vol 72; p1595-1602

Malouf, G. (2014). *Just sit for a bit: A moment of caring*. University of San Francisco, California.

Manias, E., & Street, A. (2001). Nurse-doctor interactions during critical care ward rounds. *Journal Of Clinical Nursing*, 10(4), 442-450. doi:10.1046/j.1365-2702.2001.00504.x
Retrieved from: <http://0-search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2001108750&site=ehost-live&scope=site>

Moroney, N., Knowles, C. (2006). Innovation and teamwork: introducing multidisciplinary team ward rounds. *Nursing management* 13 (1).

NCSBN (2002). Nursing's agenda for the future: a call to the nation. National Council of State Boards of Nursing, Inc. Long Beach, California.

Sehgal, N., & Auerbach, A. (2011). Communication failures and a call for new systems to promote patient safety: comment on "structured interdisciplinary rounds in a medical teaching unit". *Archives Of Internal Medicine*, 171(7), 684-685.
doi:10.1001/archinternmed.2011.129 Retrieved from: <http://0-search.ebscohost.com/ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2011012139&site=ehost-live&scope=site>

Licata, J., Aneja, R. K., Kyper, C., Spencer, T., Tharp, M., Scott, M., & ... Pasek, T. (2013). In Our Unit. A Foundation for Patient Safety: Phase I Implementation of interdisciplinary Bedside Rounds in the Pediatric Intensive Care Unit. *Critical Care Nurse*, 33(3), 89-91.
doi:10.4037/ccn2013280. Retrieved from: <http://0-search.ebscohost.com/ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2012141322&site=ehost-live&scope=site>

Stickrath, C., Noble, M., Prochazka, A., Anderson, M., Griffiths, M., Manheim, J., Sillau, S., Aagaard, E. (2013). Attending Rounds in the Current Era. *JAMA international* 172(12).

Tang, C., Chan, S., Zhou, W., Liaw, S. (2013). Collaboration between hospital physicians and nurses: an integrated literature review. *International nursing review* 60, 291-302.

Vazirani, S., Hays, R., Shapiro, M., & Cowan, M. (2005). Effect of a multidisciplinary intervention on communication and collaboration among physicians and nurses. *American Journal Of Critical Care, 14*(1), 71-77. Retrieved from: <http://0-search.ebscohost.com/ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=2005050641&site=ehost-live&scope=site>

Appendix List

Appendix A: Pre-Implementation Questionnaire for RN's

Appendix B: Team Rounds Schedule

Appendix C: Post Implementation Questionnaire for RN's

Appendix D: Survey created to assess MD's Pre-implementation (not used in study)

Appendix E: Survey created to assess MD's Post-implementation (not used in study)

Appendix A

1. Do you currently attend physician rounds on your assigned shifts?
Yes_____ No_____

2. If no, why don't you attend physician rounds?

a.) In another patient's room

b.) Don't know physician's rounding

c.) Busy

d.) More than 1 team rounding at same time

e.) Isn't important

Thank you very much for your time and participation!

Appendix B

Team Rounds Schedule

Arrive	Team	Depart
10:00	C	10:07
10:08	B	10:15
10:16	D	10:23
10:26	E	10:33
10:41	A	10:48

Appendix C

Post Assessment RN Likert Scale Questionnaire

1. Has your communication with the attending physician(s) and/or his/her team increased?
Disagree 1-----2-----3-----4-----5 Agree

2. How many times have you worked in the past week?
Shifts/week: 0---1-----2---3---4---5---6---7

3. How many times have you attended physician rounds in the last week?
Shifts/week: 0---1-----2---3---4---5---6---7

4. I feel I am less likely to page MD/team when I attend physician rounds.
Yes_____ No_____

Thank you very much for your time and participation!

Appendix D

Pre-Implementation Questionnaire for Attending Physician

1. At what time do you currently round?
Time: _____ or Varies daily _____

2. Why do you think nurses aren't attending current patient rounding?
 - f.) In another patient's room
 - g.) Don't know I'm there
 - h.) Busy
 - i.) More than 1 team rounding at same time
 - j.) Isn't important

3. If nurses attended physician rounds, do you think it would save you time not being paged as often?
Yes _____ No _____

4. Would you, or someone on your team, sign in at the nurses station to alert the unit secretary that you were beginning your patient rounds?
Yes _____ No _____

Thank you very much for your time and participation!

Appendix E

Post Assessment MD Likert Scale Questionnaire

1. Has your communication with nurses increased?
Disagree 1----2----3----4----5 Agree
2. How many times have you worked in the past week?
0----1----2----3----4----5----6----7
3. How many times have the nurses attended rounds with you in the past week?
0----1----2----3----4----5----6----7
4. Has the Unit Secretary been available when you went to check in?
Yes_____ No_____
5. If rounding with RN's has occurred, has it saved you time?
Yes_____ No_____

Thank you very much for your time and participation!