Implementing and evaluating a nurse-physician bedside rounding protocol to improve patient outcomes in an acute care organization

Tyler Sturdivant

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IMPLEMENTING AND EVALUATING A NURSE-PHYSICIAN BEDSIDE Rounding Protocol to Improve Patient Outcomes in an Acute Care Organization

by

TYLER STURDIVANT, MSN, RN, AGCNS-BC, SCRN

A DNP PROJECT

Submitted in partial fulfillment of the requirements for the Degree of Doctor of Nursing Practice to The School of Graduate Studies of The University of Alabama in Huntsville

HUNTSVILLE, ALABAMA 2019
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DNP PROJECT APPROVAL FORM

Submitted by Tyler Sturdivant in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice and accepted on behalf of the Faculty of the School of Graduate Studies by the DNP project committee.

We, the undersigned members of the Graduate Faculty of The University of Alabama in Huntsville, certify that we have advised and/or supervised the candidate on the work described in this DNP project. We further certify that we have reviewed the DNP project manuscript and approve it in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice.

10/20/19 Committee Chair
(Date)

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DNP Program Coordinator

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College of Nursing, Associate Dean

Mark J. Adams
College of Nursing, Dean

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Graduate Dean
ABSTRACT
The School of Graduate Studies
The University of Alabama in Huntsville

Degree: Doctor of Nursing Practice College: Nursing

Name of Candidate: Tyler Sturdivant

Title: Implementing and Evaluating a Nurse-Physician Bedside Rounding Protocol to Improve Patient Outcomes in an Acute Care Organization

Interprofessional communication supports collaboration, discussion, and timely interventions to reduce occurrences of adverse patient events, such as dissatisfaction with care or increased facility readmission rates. Elevated facility readmissions above the national benchmark and reduced patient satisfaction as seen on the Centers for Medicare and Medicaid’s (CMS) Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey increase risk of CMS reimbursement loss, potentially impacting the institution’s financial bottom line.

Implementation of a nurse leader-physician bedside rounding protocol was initiated on a 34-bed medical-surgical unit at an academic-medical center in the Southeastern United States. Five internal medicine teams participated in bedside rounds with a nurse leader each day on new admissions utilizing the structured PATIENT rounding tool for 30 days. Calculation of rounding adherence, unit-specific readmission rates, and unit-specific HCAHPS scores in nursing communication and physician communication was completed. During the 30-day implementation period, nurses and physicians completed combined bedside rounds on 104 out of 118 eligible patients, demonstrating an adherence rate of 88.14% to the protocol. The 30-day all-cause unit-specific readmission rate during the implementation period was 18.62%, 1.72% above the three-month baseline average ($p=0.668$). The unit-specific HCAHPS score in nursing communication was 76.75% during implementation, a 1.95% increase in satisfaction when
compared to the three-month baseline ($p=0.9158$). The unit-specific HCAHPS score in physician communication was 78.15%, a 1.52% increase in satisfaction when compared to the three-month baseline ($p=0.9290$). Incorporation of a nurse leader-physician bedside rounding protocol improves interprofessional collaboration and communication that has the potential to positively impact patient outcomes. Despite improvement in patient satisfaction on HCAHPS with nursing and physician communication and an increase in unit-specific readmissions during the implementation period, neither were statistically significant. A longer implementation and evaluation period and inclusion of all medical specialties in the protocol should demonstrate greater improvement and statistical significance.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>41</td>
</tr>
<tr>
<td>List of Figures</td>
<td>43</td>
</tr>
<tr>
<td><strong>SECTION I: DNP PROJECT</strong></td>
<td></td>
</tr>
<tr>
<td>I. Introduction</td>
<td>8</td>
</tr>
<tr>
<td>A. Significance of the Problem</td>
<td>8</td>
</tr>
<tr>
<td>B. Evidence of the Problem</td>
<td>9</td>
</tr>
<tr>
<td>II. Synthesis of the Literature</td>
<td>11</td>
</tr>
<tr>
<td>A. Nurse-Physician Rounding on Patient Satisfaction</td>
<td>12</td>
</tr>
<tr>
<td>B. Interprofessional Rounding on Readmissions</td>
<td>13</td>
</tr>
<tr>
<td>III. Conceptual Framework</td>
<td>16</td>
</tr>
<tr>
<td>IV. Methodology</td>
<td>17</td>
</tr>
<tr>
<td>A. Implementation</td>
<td>17</td>
</tr>
<tr>
<td>B. Evaluation</td>
<td>20</td>
</tr>
<tr>
<td><strong>SECTION II: DNP PROJECT PRODUCT</strong></td>
<td></td>
</tr>
<tr>
<td>I. Professional Journal Selection</td>
<td>21</td>
</tr>
<tr>
<td>II. A Nurse Leader-Physician Bedside Rounding Protocol to Improve Patient Outcomes</td>
<td>22</td>
</tr>
<tr>
<td>Tables</td>
<td>41</td>
</tr>
<tr>
<td>Baseline Medical-Surgical HCAHPS Scores – Nursing Communication Domain</td>
<td>41</td>
</tr>
<tr>
<td>Baseline Medical-Surgical HCAHPS Scores – Physician Communication Domain</td>
<td>42</td>
</tr>
<tr>
<td>Figures</td>
<td>43</td>
</tr>
<tr>
<td>Implementation Readmission Rates</td>
<td>43</td>
</tr>
</tbody>
</table>
Implementation HCAHPS Scores in Nursing Communication……………………...44
Implementation HCAHPS Scores in Physician Communication…………………45
Appendices........................................................................................................46
Author Permission for PATIENT Tool..............................................................46
PATIENT Tool..................................................................................................47
Daily Process Instruction Sheet.......................................................................48
Daily Compliance Log....................................................................................49
University of Alabama in Huntsville Institutional Review Board Approval……50
University of South Alabama Institutional Review Board Approval…………….51
References........................................................................................................37
Implementing and Evaluating a Nurse-Physician Bedside Rounding Protocol to Improve Patient Outcomes in an Acute Care Organization

**Introduction**

The Institute for Healthcare Communication reports a strong correlation between the healthcare team’s ability to communicate and the patient’s ability to appropriately partake in care (Institute for Healthcare Communication [IHC], 2011). Without purposeful communication between the healthcare team and the patient, the patient’s capacity to follow simple medical recommendations, participate in self-care of chronic conditions, adopt preventative health behaviors, and report satisfactory care are reduced, all of which may lead to longer lengths of stay and higher readmission rates (IHC, 2011). Interprofessional communication, defined as communication that occurs between more than one healthcare discipline and the patient, supports collaboration, discussion, and timely interventions to reduce occurrences of miscommunication that may lead to adverse patient events or patient dissatisfaction with care (Ashcraft et al., 2017).

**Significance of the Problem**

To ensure quality healthcare services are provided, there is national support for efforts to improve communication between both healthcare providers and patients (The Joint Commission, 2018). Hospitals participating in the Centers for Medicare and Medicaid Services (CMS) Value-Based Purchasing (VBP) system receive either a bonus or penalty each year based on quality of care provided to patients, not quantity. Specifically under the Inpatient Prospective Payment System (IPPS), facilities can experience up to a 2% reduction in Medicare severity diagnosis-related group (MS-DRG) payments if performance in four domains is subpar: clinical care, patient and caregiver experience, safety, and efficiency and cost reduction (CMS, 2018). Based
on fiscal year 2018 results, the project facility will incur a $109,885 reduction in MS-DRG payments in 2019 (Advisory Board Company, 2019).

Also falling under CMS’s VBP system, facilities participating in the Hospital Readmissions Reduction Program (HRRP) may experience up to a 3% reduction in Medicare fee-for-service payments if excess readmission ratios are calculated in the following six medical diagnoses: acute myocardial infarction, chronic obstructive pulmonary disease (COPD), heart failure, pneumonia, coronary artery bypass graft surgery, and elective primary total hip and/or knee arthroplasty (CMS, 2019). For fiscal year 2018, $564 million in payments were reduced nationally to hospitals for excessive readmissions under the HRRP (Advisory Board Company, 2017). Based on fiscal year 2018 results, the project facility will incur a $15,008 reduction in CMS payments under the HRRP (Advisory Board Company, 2019).

With hospital reimbursement from CMS tied to inpatient patient satisfaction of care and patient readmissions, facilities may experience a large fiscal impact if satisfactory and quality care are not provided (CMS, 2018). Institutions scoring below national benchmark on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient satisfaction survey increase risk of incentive and/or reimbursement loss (Hudson-Covolo, Rivers, & Irwin, 2018). Excessive readmission ratios between the actual number of readmissions when compared to the predicted number of readmissions also risk CMS incentive and/or reimbursement loss.

**Evidence of the Problem**

For March, April, and May 2019 at the project facility, HCAHPS scores were below institutional benchmark of the 75th percentile on 73.6% of questions on the primary medical-surgical floor. Specifically in the nursing communication domain, to reach the 75th percentile,
patients should score the most positive answer at least 84% of the time. For the medical-surgical project floor, the three-month average prior to implementation for most positive answers in the nursing communication domain was 74.80%, displaying scores 9.20% below the 75th percentile (see Table 1 for individual question scores). In the physician communication domain, to reach the 75th percentile, patients should score the most positive answer at least 85% of the time. For the medical-surgical project floor, the three-month average prior to implementation for most positive answers in the physician communication domain was 76.63%, displaying scores 8.37% below the 75th percentile (see Table 2 for individual question scores). Scores lower than institutional benchmark on the medical-surgical floor contribute to overall facility scores that may reduce CMS reimbursement regarding patient satisfaction of care.

Serving the medical-surgical population, the project floor primarily treats three of the six diagnoses calculated for readmission reimbursement by CMS: heart failure, pneumonia, and COPD. For March, April, and May 2019, the medical-surgical unit’s 30-day all-cause readmission rate for the project facility was 16.91%. At the project facility, 30-day readmission rates for heart failure, pneumonia, and COPD diagnoses were below national average, demonstrating success with current processes aimed at reducing readmission rates for these diagnoses facility-wide. The unit-specific 30-day all-cause readmission rate at the project facility was 1.61% higher than the national average, demonstrating the necessity for important process changes to reduce this rate below national average. Though only reimbursed based on performance of the previously mentioned diagnoses, CMS calculates all-cause readmission rates on all facilities with encouragement to maintain this rate below 15.30% as reimbursed medical conditions are included (CMS, 2019).
Aim of the Project

Through improved collaborative communication between the nurse, physician, and patient during hospitalization, the project aimed to increase unit-specific patient satisfaction scores regarding nurse and physician communication and decrease unit-specific readmission rates through combined nurse-physician bedside daily rounds. Specifically, objectives of the project included improvement in patient satisfaction scores in nursing communication and physician communication by at least 5% on the respective HCAHPS domains, reduction of unit-specific 30-day all-cause readmission rates by at least 1.0%, and performance of nurse-physician bedside rounding on newly admitted patients at least 75% of the time. Prior to implementation, the medical-surgical project floor had no structured rounding protocol that included nursing personnel.

Synthesis of Literature

To perform a literature search, the author utilized the following guiding question: In the medical-surgical inpatient population, does the implementation of a structured nurse-physician bedside rounding protocol improve patient satisfaction with care and readmission rates after 30 days of intervention? Multiple databases were utilized during the literature review process. Databases included EBSCO, CINAHL, MEDLINE, and PubMed. Key terms consisted of nurse, physician, interprofessional, rounding, rounds, satisfaction, and readmission with combinations utilizing the Boolean phrase AND. The limits set during the literature search included articles published in English and articles from the last six years.

The initial search of nurse, physician, and rounds yielded 558 results. Next, nurse, physician, and rounding yielded 85 results. Interprofessional, rounds, and satisfaction yielded 63 results, while interprofessional, rounds, and readmission only yielded 4 results. To achieve
greater results regarding interprofessional rounding and the impact on readmissions, the search terms *interprofessional*, *rounding*, and *readmission* were utilized, yielding 258 results. After the initial search and several revisions, a total of 11 pertinent articles were selected, including one systematic review and 10 quality improvement resources.

**Nurse-Physician Rounding and Patient Satisfaction**

The implementation of a nurse-physician bedside rounding protocol improves patient satisfaction of care in the inpatient setting (Bhamidipati et al., 2016). All literature below focused on daily nurse-physician discussion with the patient regarding plan of care, clinical updates, noted concerns, and discharge plans. Improvements in patient satisfaction were determined through increased scores in either the HCAHPS or Press Ganey surveys (Breger, 2015; Cleveland Clinic, 2014; Johnson & Conner, 2014; Mathai, 2017; Menefee, 2014; Pritts & Hiller, 2014; Reigel, Delp, & Ward, 2018).

Breger (2015) reports an average increase of 15.3% on the nursing communication domain and an average increase of 10.3% on the physician communication domain on HCAHPS after five months of implementation on a 36-bed medical-surgical unit. The Cleveland Clinic (2014) reports an increase of 8.7% in the nursing communication domain and an increase of 7.3% in the physician communication domain on HCAHPS after implementation on 12 cardiovascular step-down units. Johnson and Conner (2014) report a 3.14% increase in nursing communication questions and a 6.13% increase in physician communication questions on HCAHPS after three months of implementation on a 36-bed medical-surgical unit. Mathai (2017) further reports a 2.9% increase in HCAHPS nursing communication questions and a 3.0% increase in HCAHPS physician communication questions.
According to Reigel et al. (2018), a 13.33% average increase in HCAHPS was noted in the nursing communication domain after two months of implementation across four medical-surgical units. In regards to improvement in the HCAHPS physician communication domain, increases in scores were noted in three of the four units under study (Reigel et al., 2018). Pritts and Hiller (2014) report implementation at a trauma center improved patient perception of nurse and physician teamwork in care by 5.2% as scored on the Press Ganey satisfaction survey. Menefee (2014) further supports implementation of interprofessional rounding as evidenced by an overall increase of 7.5% in patient satisfaction as reported on the Press Ganey survey in a rural community hospital.

**Interprofessional Rounding and Patient Readmissions**

The implementation of interprofessional bedside rounding improves 30-day all-cause readmission rates on both the unit and facility levels. All interprofessional rounding teams included at least a nurse and physician. Discussion was provided on the plan of care, medication updates, mutual concerns, and pertinent assessment data with the patient (Hartigan, 2016; Li et al., 2018; Menefee, 2014; Parks, 2015).

Hartigan (2016) reports the use of interprofessional bedside rounding reduced 30-day all-cause readmissions by 1.0% after 12 months of implementation on a medical-surgical unit. Li et al. (2018) reports a decreased 30-day all-cause readmission rate of 3.87%. Results were calculated after six months of implementation on a 30-bed medical surgical unit (Li et al., 2018). Menefee (2014) reports a reduction in 30-day all-cause readmissions by 5.3% after 12 months of implementation of interdisciplinary rounds in a rural community hospital. After three months of implementation of an interdisciplinary rounding protocol on a medical-surgical unit, Parks (2015) experienced a 5.0% decrease in 30-day all-cause readmissions.
Process of Nurse-Physician Bedside Rounding

Most nurse-physician bedside rounding protocols include a list of topics or script to follow when rounding (Cleveland Clinic, 2015; Hartigan, 2016; Johnson & Conner, 2014; Li et al., 2018; Mathai, 2017; Menefee, 2014). Johnson and Conner (2014) specifically created and utilized a structured nurse-physician PATIENT rounding tool that scripts discussion with the patient regarding the plan of care, anticipated discharge date, test and diagnostic results, issues or concerns, explanation of medications, nursing feedback on pain control, and thanks for visiting the facility. Three articles noted a purposeful lack of scripting for rounding to encourage patient participation and expression of concerns (Breger, 2015; Parks, 2015; Pritts & Hiller, 2014; Riegel et al., 2018). Use of in-room whiteboards are encouraged during bedside rounding to communicate updates and encourage patient communication (Breger, 2015; Hartigan, 2016; Mathai, 2017).

Most nurse-physician protocols include the primary bedside nurse paired with the primary physician for rounding (Cleveland Clinic, 2015; Hartigan, 2016; Johnson & Conner, 2014; Mathai, 2017; Parks, 2015; Pritts & Hiller, 2014; Riegel et al., 2018). In the event the primary bedside nurse or physician is unavailable for rounding, another bedside nurse or unit nurse leader is encouraged to round with the primary physician or another physician team member (Breger, 2015; Li et al., 2018; Menefee, 2014). A pre-established paging system can be utilized to notify the nurse that the physician is ready to complete bedside rounds (Mathai, 2017; Pritts & Hiller, 2014; Riegel et al., 2018). Riegel et al. (2018) specifically discuss the use of laminated signs placed on the outside of the patient’s door, notifying the primary physician of the primary nurse and paging contact information.
Nurse-physician bedside rounding frequency varies in the literature. Some protocols require bedside rounding on the patient each day during the inpatient stay (Cleveland Clinic; 2015; Johnson & Conner, 2014; Mathai, 2017; Parks, 2015; Riegel et al., 2018). Other protocols require rounding on admission or at least once during the inpatient stay (Breger, 2015; Hartigan, 2016; Li et al., 2018; Menefee, 2014; Pritts & Hiller, 2014). Johnson and Conner (2014) report calculating daily bedside rounding compliance through comparison of nursing census lists with physician team lists.

**Translating the Evidence**

The author was able to utilize evidence-based recommendations to develop a facility-specific nurse-physician bedside rounding protocol. As an academic-medical center, the project facility pilots numerous quality and performance improvement processes to improve patient, nurse, and organizational outcomes. Serving a primarily indigent population, bedside nurses often carry a 6 to 1 nurse-patient ratio with high acuity on the medical-surgical floor. To limit extraneous bedside staff workload, the project utilized unit nurse leaders that are not in usual daily patient staffing. With patient care oversight, the resident physician participated in rounding; if the resident physician was unavailable, a member of the patient’s physician team participated in bedside rounding.

To prevent innovation fatigue of the nursing and physician staff, nurse-physician bedside rounding was completed daily only on new admissions. To accommodate busy physician schedules, the physician paged the assigned nurse leader when rounding was ready to begin. Structured rounding communication was preferred that outlined discussion for both nursing and physician staff to maintain consistency.
Based on facility patient satisfaction data reporting, the project utilized monthly HCAHPS survey data to determine improvement in patient satisfaction in both the nursing communication and physician communication domains. Unit-specific 30-day all-cause readmissions were calculated. Though not specific to the diagnoses of heart failure, COPD, and pneumonia, these three diagnoses are included in the readmission rate on the unit level, subsequently impacting the facility-wide readmission rate and eligibility for reimbursement. Nurse leaders completed a rounding log each day and calculated compliance through comparison of the log with the daily unit census and physician records.

**Conceptual Framework**

Hildegard Peplau’s interpersonal relations in nursing theory, a middle-range theory, describes nursing as an interpersonal process where healthcare professionals purposely engage in therapeutic relationships with patients and families. Focusing on collaboration between the provider and patient instead of one-way provider communication leads to better understanding of patient needs, improving patient outcomes and perceptions of care (Peplau, 1952). In order to be successful, the nurse-patient collaborative relationship must progress through the orientation, working, and termination phases (Hochberger & Lingham, 2016).

The orientation phase is brief where the patient seeks assistance in care, and the nurse begins the therapeutic relationship with courtesy and respect. The working phase accounts for the majority of the therapeutic relationship where the nurse performs assessments and teaching strategies for the interdisciplinary plan of care. Nurses utilize active listening techniques and feedback to assist in clarifying thoughts and understanding satisfaction with care. Throughout this process, the patient gains trust in the nurse and accepts the professional as an educator, resource person, counselor, and experienced care provider. The termination phase aims to
prepare the patient for discharge, self-reliant care at home, and the end of the therapeutic relationship between the patient and nurse (Hagerty, Samuels, Norcini-Pala, & Gigliotti, 2017).

When applying Peplau’s interpersonal relations in nursing theory to a nurse-physician bedside rounding protocol, the essence of promoting a therapeutic collaborative relationship was elevated with the addition of a physician. The underlying constructs of effective communication and relationship-building between the nurse and patient in Peplau’s theory was replaced with the nurse-physician unit in the project. The nurse-physician dyad progressed through the three stages together during bedside rounds, developing the trusting collaborative relationship necessary to provide adequate communication to prevent readmissions and improve satisfaction of care.

**Implementation**

The implementation of a nurse-physician bedside rounding protocol was a quality improvement project that took place on a 34-bed medical-surgical unit. The facility is an academic-medical center located in the Southeastern United States that houses a Level 1 trauma center and regional burn center. Each day, participants newly admitted to the floor the previous day participated in rounding. With an average new admission rate of 5 patients per day, the anticipated sample size over a 30-day implementation period was 150 patients. Patients on the medical-surgical floor were admitted with a variety of diagnoses, including but not limited to heart failure, sickle cell disease, cerebrovascular accidents, cirrhosis, COPD, sepsis, and pneumonia. As an adult academic medical center, patients ranged from 18 years old to death, with a male, female, or transgender gender status. No patients under the age of 18 were included. Ethnicity of patients included but were not limited to Caucasian, African American, Hispanic, Asian, and Native American. The implementation spanned 30 days, with implementation only occurring on weekdays.
The project was submitted for expedited review with The University of Alabama in Huntsville Institutional Review Board (IRB). Facility-specific IRB approval at the University of South Alabama Health University Hospital was obtained as well. Informed consent for participants was not necessary. The implementation of nurse-physician bedside rounding replaced fragmented patient communication with the nurse and physician that was previously in place. All information discussed with the patient during nurse-physician rounds was no different than individual nurse or physician communication and was necessary to provide standard patient care. Nurse-physician rounds streamlined communication between the patient and healthcare providers.

On the implementation unit, there are a total of five internal medicine physician teams, with patients assigned to one of the five teams upon admission. Each physician team consists of an attending physician, one resident, and two or three interns, depending on staffing and intern availability. The attending physician holds complete oversight of the physician team, while the resident holds supervisory authority of the care provided to patients by the interns. Nursing leadership on the medical-surgical unit includes one nurse manager, one clinical unit educator, two clinical nurse leaders, and one floating charge nurse. The nurse manager holds complete oversight of the medical-surgical unit, while the floating charge nurse holds supervisory authority of the care provided by seven registered nurses, one licensed practical nurse, and four patient care assistants. The clinical unit educator and two clinical nurse leaders hold lateral positions above the charge nurse and below the nurse manager; the clinical unit educator is responsible for educating staff and patients, while the primary focus of clinical nurse leader practice is the reduction of readmissions on the floor.
For the project, each member of nursing leadership was assigned to one of the five internal medicine physician teams for bedside rounding. By 0730, each member of nursing leadership received a printed daily unit census from the unit secretary to identify patients admitted to the unit and each team the previous day. Each nurse leader received a brief clinical update from the primary nurse on new team admissions by 0800. The resident received a brief clinical update from the interns on newly admitted patients by 0800.

Upon arriving to the unit, each resident paged the assigned nurse leader to notify that the bedside rounding process was ready to begin. The nurse leader and resident only provided bedside rounding on patients admitted to the unit the previous day. On Mondays, the nurse leader and resident rounded on newly admitted patients over the weekend, if still admitted. The structured PATIENT tool was utilized by the nurse leader and resident to communicate during bedside rounds (see Appendix A for PATIENT tool permission). A printed PATIENT tool was placed in each of the 34 rooms to encourage active participation in the rounding process by the patient and to provide a reminder to the nurse leader and resident to utilize the tool during rounding (see Appendix B for PATIENT tool example). A laminated instruction sheet on the nurse-physician rounding process was placed in each physician rounding room for reference (see Appendix C for instruction sheet). On most days, nurse leaders and residents completed bedside rounding on admissions by 0930 each day.

After the completion of bedside rounding, each nurse leader completed a rounding log created by the author. The rounding log was kept at the front desk with locations for the patient’s name, nurse leader’s name, physician’s name, admission date, rounding date, concerns of the patient, if family was present, and follow-up with the primary nurse (see Appendix D for
Residents reported bedside rounding discussions during table rounds with the entire physician team in the afternoon.

**Evaluation**

Successful evaluation of a nurse-physician bedside rounding protocol was based on two overarching outcome measures and one process measure. The project aimed to improve patient satisfaction scores in nursing communication and physician communication by at least 5% on the respective HCAHPS domains. In addition, a reduction of 1.0% in 30-day unit-specific all-cause was projected. A Chi-square was conducted between pre and post-implementation HCAHPS scores and readmission rates to determine statistical significance via version 25 of the Statistical Package for the Social Sciences (SPSS). For evaluation of the process, completion of nurse-physician bedside rounding was projected to occur on at least 75% of newly admitted patients.

Facility and unit HCAHPS results were reported to the chief nursing officer and the patient relations officer one month after completion. Unit scores on nursing communication and physician communication during the one month of implementation were compared to the unit’s previous three-month average in these two domains. Unit-specific all-cause readmission rates during the implementation period were compared to the unit’s previous three-month average. Readmission data was retrieved from the facility’s electronic health record. Access to the electronic health record was provided to the author by the director of staff development.

For calculation of bedside rounding compliance, the author compared the rounding log with the daily unit census to ensure all newly admitted patients participated in bedside rounding. During the implementation period, compliance was calculated on a daily basis. After the implementation period, the author suggested calculating daily rounding compliance on a weekly basis.
Professional Journal Selection

*Nursing Economic*$ is the selected journal for submission of the final project manuscript.

*Nursing Economic*$ advances nursing leadership in healthcare, focusing on providing information and analyses of current and emerging practices in healthcare management, economics, and policy. The journal is published six times yearly and supports nurse leaders who are instrumental in impacting healthcare cost and quality outcomes (*Nursing Economic*$, 2019).

With the implementation of a nurse-physician bedside rounding protocol and evaluation of its fiscal impact related to patient satisfaction and readmission rates, this journal is appropriate.
A Nurse Leader-Physician Bedside Rounding Protocol to Improve Patient Outcomes

Tyler Sturdivant, MSN, RN, AGCNS-BC, SCRN
Mark Reynolds, DNP, RN, COI
Kristen Herrin, DNP, RN, COI
Lisa Mestas, MSN, BAS, RN
A Nurse Leader-Physician Bedside Rounding Protocol to Improve Patient Outcomes

Introduction

The Institute for Healthcare Communication reports a strong correlation between the healthcare team’s ability to communicate and the patient’s ability to appropriately partake in care (Institute for Healthcare Communication [IHC], 2011). Without purposeful communication between the healthcare team and the patient, the patient’s capacity to follow simple medical recommendations, participate in self-care of chronic conditions, adopt preventative health behaviors, and report satisfactory care are reduced, all of which may lead to longer lengths of stay and higher readmission rates (IHC, 2011). Interprofessional communication, defined as communication that occurs between more than one healthcare discipline and the patient, supports collaboration, discussion, and timely interventions to reduce occurrences of miscommunication that may lead to adverse patient events or patient dissatisfaction with care (Ashcraft et al., 2017).

To ensure quality healthcare services are provided, there is national support for efforts to improve communication between both healthcare providers and patients (The Joint Commission, 2018). Hospitals participating in the Centers for Medicare and Medicaid Services (CMS) Value-Based Purchasing (VBP) system receive either a bonus or penalty each year based on quality of care provided to patients, not quantity. Specifically under the Inpatient Prospective Payment System (IPPS), facilities can experience up to a 2% reduction in Medicare severity diagnosis-related group (MS-DRG) payments if performance in four domains is subpar: clinical care, patient and caregiver experience, safety, and efficiency and cost reduction (CMS, 2018). Also falling under CMS’s VBP system, facilities participating in the Hospital Readmissions Reduction Program (HRRP) may experience up to a 3% reduction in Medicare fee-for-service payments if excess readmission ratios are calculated in the following six medical diagnoses: acute myocardial
infection, chronic obstructive pulmonary disease (COPD), heart failure, pneumonia, coronary artery bypass graft surgery, and elective primary total hip and/or knee arthroplasty (CMS, 2019). For fiscal year 2018, $564 million in payments were reduced nationally to hospitals for excessive readmissions under the HRRP (Advisory Board Company, 2017).

With hospital reimbursement from CMS tied to inpatient patient satisfaction of care and patient readmissions, facilities may experience a large fiscal impact if satisfactory and quality care are not provided (CMS, 2018). Institutions scoring below national benchmark on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient satisfaction survey increase risk of incentive and/or reimbursement loss (Hudson-Covolo, Rivers, & Irwin, 2018). Excessive readmission ratios between the actual number of readmissions when compared to the predicted number of readmissions also risk CMS incentive and/or reimbursement loss. To reduce risk of reimbursement loss related to reduced patient satisfaction and excessive readmission rates, the implementation of a nurse leader-physician bedside rounding protocol on a 34-bed medical-surgical unit at an academic-medical center in the southeastern United States will be detailed.

**Synthesis of Literature**

To perform a literature search, the author utilized the following guiding question: “In the medical-surgical inpatient population, does the implementation of a structured nurse-physician bedside rounding protocol improve patient satisfaction with care and readmission rates after 30 days of intervention?” Multiple databases were utilized during the literature review process. Databases included EBSCO, CINAHL, MEDLINE, and PubMed. Key terms consisted of nurse, physician, interprofessional, rounding, rounds, satisfaction, and readmission with combinations
utilizing the Boolean phrase AND. The limits set during the literature search included articles published in English and articles from the last six years.

The initial search of nurse, physician, and rounds yielded 558 results. Next, nurse, physician, and rounding yielded 85 results. Interprofessional, rounds, and satisfaction yielded 63 results, while interprofessional, rounds, and readmission only yielded 4 results. To achieve greater results regarding interprofessional rounding and the impact on readmissions, the search terms interprofessional, rounding, and readmission were utilized, yielding 258 results. After the initial search and several revisions, a total of 11 pertinent articles were selected, including one systematic review and 10 quality improvement resources.

**Nurse-Physician Rounding and Patient Satisfaction**

The implementation of a nurse-physician bedside rounding protocol improves patient satisfaction of care in the inpatient setting (Bhamidipati et al., 2016). All literature below focused on daily nurse-physician discussion with the patient regarding plan of care, clinical updates, noted concerns, and discharge plans. Improvements in patient satisfaction were determined through increased scores in either the HCAHPS or Press Ganey surveys (Breger, 2015; Cleveland Clinic, 2014; Johnson & Conner, 2014; Mathai, 2017; Menefee, 2014; Pritts & Hiller, 2014; Reigel, Delp, & Ward, 2018).

Breger (2015) reports an average increase of 15.3% on the nursing communication domain and an average increase of 10.3% on the physician communication domain on HCAHPS after five months of implementation on a 36-bed medical-surgical unit. The Cleveland Clinic (2014) reports an increase of 8.7% in the nursing communication domain and an increase of 7.3% in the physician communication domain on HCAHPS after implementation on 12 cardiovascular step-down units. Johnson and Conner (2014) report a 3.14% increase in nursing
communication questions and a 6.13% increase in physician communication questions on HCAHPS after three months of implementation on a 36-bed medical-surgical unit. Mathai (2017) further reports a 2.9% increase in HCAHPS nursing communication questions and a 3.0% increase in HCAHPS physician communication questions.

According to Reigel et al. (2018), a 13.33% average increase in HCAHPS was noted in the nursing communication domain after two months of implementation across four medical-surgical units. In regards to improvement in the HCAHPS physician communication domain, increases in scores were noted in three of the four units under study (Reigel et al., 2018). Pritts and Hiller (2014) report implementation at a trauma center improves patient perception of nurse and physician teamwork in care by 5.2% as scored on the Press Ganey satisfaction survey. Menefee (2014) further supports implementation of interprofessional rounding as evidenced by an overall increase of 7.5% in patient satisfaction as reported on the Press Ganey survey in a rural community hospital.

**Interprofessional Rounding and Patient Readmissions**

The implementation of interprofessional bedside rounding improves 30-day all-cause readmission rates on both the unit and facility levels. All interprofessional rounding teams included at least a nurse and physician. Discussion was provided on the plan of care, medication updates, mutual concerns, and pertinent assessment data with the patient (Hartigan, 2016; Li et al., 2018; Menefee, 2014; Parks, 2015).

Hartigan (2016) reports the use of interprofessional bedside rounding reduced 30-day all-cause readmissions by 1.0% after 12 months of implementation on a medical-surgical unit. Li et al. (2018) reports a decreased 30-day all-cause readmission rate of 3.87%. Results were calculated after six months of implementation on a 30-bed medical surgical unit (Li et al., 2018).
Menefee (2014) reports a reduction in 30-day all-cause readmissions by 5.3% after 12 months of implementation of interdisciplinary rounds in a rural community hospital. After three months of implementation of an interdisciplinary rounding protocol on a medical-surgical unit, Parks (2015) experienced a 5.0% decrease in 30-day all-cause readmissions.

**Process of Nurse-Physician Bedside Rounding**

Most nurse-physician bedside rounding protocols include a list of topics or script to follow when rounding (Cleveland Clinic, 2015; Hartigan, 2016; Johnson & Conner, 2014; Li et al., 2018; Mathai, 2017; Menefee, 2014). Johnson and Conner (2014) specifically created and utilized a structured nurse-physician PATIENT rounding tool that scripts discussion with the patient regarding the plan of care, anticipated discharge date, test and diagnostic results, issues or concerns, explanation of medications, nursing feedback on pain control, and thanks for visiting the facility. Three articles noted a purposeful lack of scripting for rounding to encourage patient participation and expression of concerns (Breger, 2015; Parks, 2015; Pritts & Hiller, 2014; Riegel et al., 2018). Use of in-room whiteboards are encouraged during bedside rounding to communicate updates and encourage patient communication (Breger, 2015; Hartigan, 2016; Mathai, 2017).

Most nurse-physician protocols include the primary bedside nurse paired with the primary physician for rounding (Cleveland Clinic, 2015; Hartigan, 2016; Johnson & Conner, 2014; Mathai, 2017; Parks, 2015; Pritts & Hiller, 2014; Riegel et al., 2018). In the event the primary bedside nurse or physician is unavailable for rounding, another bedside nurse or unit nurse leader is encouraged to round with the primary physician or another physician team member (Breger, 2015; Li et al., 2018; Menefee, 2014). A pre-established paging system can be utilized to notify the nurse that the physician is ready to complete bedside rounds (Mathai, 2017;
Pritts & Hiller, 2014; Riegel et al., 2018). Riegel et al. (2018) specifically discuss the use of laminated signs placed on the outside of the patient’s door, notifying the primary physician of the primary nurse and paging contact information.

Nurse-physician bedside rounding frequency varies in the literature. Some protocols require bedside rounding on the patient each day during the inpatient stay (Cleveland Clinic; 2015; Johnson & Conner, 2014; Mathai, 2017; Parks, 2015; Riegel et al., 2018). Other protocols require rounding on admission or at least once during the inpatient stay (Breger, 2015; Hartigan, 2016; Li et al., 2018; Menefee, 2014; Pritts & Hiller, 2014). Johnson and Conner (2014) report calculating daily bedside rounding compliance through comparison of nursing census lists with physician team lists.

**Methods**

The University of Alabama in Huntsville and the University of South Alabama Institutional Review Boards approved the quality improvement project of implementing a nurse leader-physician bedside rounding protocol (see Appendices E & F for approvals). The project facility is an academic-medical center located in the Southeastern United States that houses a Level 1 trauma center and regional burn center. Specific protocol implementation occurred on a 34-bed medical-surgical floor. Patients on the medical-surgical floor were admitted with a variety of diagnoses, including but not limited to heart failure, sickle cell disease, cerebrovascular accidents, cirrhosis, COPD, sepsis, and pneumonia. No patients under the age of 18 were included.

On the implementation unit, there are a total of five internal medicine physician teams, with patients assigned to one of the five teams upon admission. Each physician team consists of an attending physician, one resident, and two or three interns, depending on staffing and intern
availability. The attending physician holds complete oversight of the physician team, while the resident holds supervisory authority of the care provided to patients by the interns. Nursing leadership on the medical-surgical unit includes one nurse manager, one clinical unit educator, two clinical nurse leaders, and one floating charge nurse. The nurse manager holds complete oversight of the medical-surgical unit, while the floating charge nurse holds supervisory authority of the care provided by seven registered nurses, one licensed practical nurse, and four patient care assistants. The clinical unit educator and two clinical nurse leaders hold lateral positions above the charge nurse and below the nurse manager; the clinical unit educator is responsible for educating staff and patients, while the primary focus of clinical nurse leader practice is the reduction of readmissions on the floor.

Serving a primarily indigent population, bedside nurses often carry a 6 to 1 nurse-patient ratio with high acuity on the medical-surgical floor. To limit extraneous bedside staff workload, the project utilized unit nurse leaders that are not in usual daily patient staffing. With patient care oversight, the resident physician participated in rounding; if the resident physician was unavailable, a member of the patient’s physician team participated in bedside rounding.

Each member of nursing leadership was assigned to one of the five internal medicine physician teams for nurse leader-physician bedside rounding. Each resident and nurse leader was provided education approximately one week prior to the start date of the 30-day implementation period that included the rounding process, the communication tool to be used, and the method for documentation. During the educational session, an estimated daily rounding time was established between the nurse leader and resident. Each resident and nurse leader was provided a copy of the communication tool and a process information sheet for reference. Nurse leaders were to educate new residents each month on the process to maintain sustainability.
Upon arriving to the unit each morning, each member of nursing leadership printed a daily unit census and identified patients admitted to the unit and which physician team the patient was assigned to. After determining admissions, each nurse leader received a brief clinical update on each new admission from the primary nurse. Upon arriving to the unit, each resident paged the assigned nurse leader to notify that the bedside rounding process was ready to begin. The nurse leader and resident only provided bedside rounding on patients admitted to the unit the previous day.

Implementation of the protocol only occurred during weekdays. On Mondays, the nurse leader and resident rounded on newly admitted patients over the weekend, if still admitted. The structured PATIENT tool was utilized by the nurse leader and resident to communicate during bedside rounds. A printed PATIENT tool was placed in each of the 34 rooms to encourage active participation in the rounding process by the patient and to provide a reminder to the nurse leader and resident to utilize the tool during rounding. A laminated instruction sheet on the nurse-physician rounding process was placed in each physician rounding room for reference. Unless there were unforeseen circumstances, nurse leader-physician rounding was completed each day for each team by 0930.

After the completion of bedside rounding, each nurse leader completed a rounding log. The rounding log was kept at the front desk with locations for the patient’s name, nurse leader’s name, physician’s name, admission date, rounding date, concerns of the patient, if family was present, and follow-up with the primary nurse. Nurse leaders reported necessary concerns, if applicable, to the primary nurse after completion of rounding. Residents reported bedside rounding discussions during table rounds with the entire physician team in the afternoon.
Unit scores on HCAHPS in the nursing communication and physician communication domains during the one month of implementation were compared to the unit’s previous three-month average in these two domains. Unit-specific 30-day all-cause readmission rates during the implementation period were compared to the unit’s previous three-month average. For calculation of bedside rounding compliance, comparison of the rounding log with the daily unit census was completed to ensure all newly admitted patients participated in bedside rounding.

Results

During the 30-day implementation period, a total of 118 patients were screened as eligible for nurse leader-physician bedside rounding. A total of 104 patients participated in nurse leader-physician rounding, demonstrating an adherence rate of 88.14% to the new protocol. Of the 104 patients, 34 reported an issue directly related to nursing care, including concerns of lack of adequate ice and water, delayed pain medication response time, and rude verbal communication from some personnel. A total of 27 patients reported issues directly related to physician care, including lack of adequate communication on discharge plans, inadequate pain management, and rude verbal communication from some physicians. Nurse leaders reported each issue to the appropriate bedside nurse after nurse leader-physician rounds, and each physician reported each issue to the physician team during later table rounds. Only 21 patients had family present during nurse leader-physician bedside rounds.

Impact on Unit-Specific Readmissions

Calculation of unit-specific readmission rates for baseline and implementation data was completed for patients with inpatient and observation admission status. Patients discharged during a specific 30-day period were searched in the electronic health record (EHR) for
readmission to the facility up to 30 days after discharge. All diagnoses regardless of payer status were included.

For March 2019, of the 197 patients discharged from the medical-surgical floor, 28 were re-admitted to the facility, demonstrating a unit-specific 30-day all-cause readmission rate of 14.21%. For the month of April 2019, of the 197 patients discharged from the medical-surgical floor, 38 were re-admitted to the facility, demonstrating a unit-specific 30-day all-cause readmission rate of 19.29%. In May 2019, of the 215 patients discharged from the medical-surgical floor, 37 were re-admitted to the facility, demonstrating a unit-specific 30-day all-cause readmission rate of 17.21%. For the 30-day implementation period, of the 188 patients discharged from the medical-surgical floor, 35 were re-admitted to the facility, demonstrating a unit-specific all-cause readmission rate of 18.62%, a 1.72% increase from the three-month baseline average of 16.90% (see Figure 1 for readmission data). A Chi-square test was completed between the 30-day implementation period readmission rate and the three-month baseline average readmission rate with no statistical significance (p=0.668).

**Impact on Unit-Specific Patient Satisfaction**

Results from unit-specific HCAHPS scores in the nursing communication and physician communication domains were retrieved from the Patient Relations Coordinator after reported by CMS. The HCAHPS survey was provided randomly to discharged patients and was completed on a voluntary basis. For the month of March 2019, the medical-surgical floor scored an 80.01% on HCAHPS in the nursing communication domain. In April 2019, the medical-surgical floor scored a 73.58% in the nursing communication domain. In May 2019, the medical-surgical floor scored 70.80% on HCAHPS in the nursing communication domain. For the 30-day implementation period, the unit-specific HCAHPS score in nursing communication was 76.75%,
demonstrating a 1.95% increase when compared to the three-month baseline average of 74.80% (see Figure 2 for nursing communication scores). A Chi-square test was completed between the 30-day implementation period HCAHPS score in nursing communication and the three-month baseline nursing communication HCAHPS score with no statistical significance (p=0.9158).

For the month of March 2019, the medical-surgical floor scored a 74.38% on HCAHPS in the physician communication domain. In April 2019, the medical-surgical floor scored a 74.98% in the physician communication domain. In May 2019, the medical-surgical floor scored 80.53% on HCAHPS in the physician communication domain. For the 30-day implementation period, the unit-specific HCAHPS score in physician communication was 78.15%, demonstrating a 1.52% increase when compared to the three-month baseline average of 76.63% (see Figure 3 for physician communication scores). A Chi-square test was completed between the 30-day implementation period HCAHPS score in physician communication and the three-month baseline physician communication HCAHPS score with no statistical significance (p=0.9290)

Discussion

The implementation of a nurse leader-physician bedside rounding protocol provides the opportunity for strengthened interprofessional collaboration in the acute care setting. Prior to project implementation, nurses and physicians rounded and approached care individually with little communication unless an order was needed or a patient issue arose. With nurse leader-physician bedside rounding, nursing professionals and physicians now communicate and collaborate to discuss patient care in a proactive and structured approach with the potential to positively impact patient outcomes.
Despite lack of statistical significance, there was improvement noted in the patient’s perception of nursing communication and physician communication after implementation of the nurse leader-physician bedside rounding protocol. Utilization of Johnson and Conner’s (2014) PATIENT communication tool for joint nurse-physician rounding provided a structured and detailed approach to joint rounding that eliminated the fragmented communication previously seen between nursing and physician practice in this medical-surgical setting. Foronda, MacWilliams, and McArthur (2016) further support a structured communication tool to successfully improve interprofessional communication skills.

**Project Difficulties**

Several issues contributed to difficulty in achieving a perfect compliance rate of nurse leader-physician bedside rounding during the 30-day implementation period. As an academic-medical center, physicians were often scheduled for didactic education during the week. Also, the nurse leaders participated in various meetings with schedules varying per week. These scheduling conflicts made it difficult to establish a consistent rounding time each day, despite an agreeable time established during the educational phase of the project.

Because of required educational sessions, scheduled meetings, and requested vacation days from physicians and nurse leaders alike, frequent daily reminders and project educational sessions from nurse leaders to substitute physicians were required. For the aforementioned reasons, lack of consistency in rounding times and rounding personnel contributed to missed team rounding on some days.

**Limitations**

The project design consisted of two main limitations. The project’s 30-day implementation period was not long enough to determine true improvement in patient
satisfaction and reduction of unit-specific readmission rates. Because interns and residents rotate through the internal medicine service monthly, solidification of the nurse leader-physician bedside rounding process will take longer as education to different physicians each month is required. Though an integral part of reducing unit-specific readmissions is adequate interprofessional communication with the patient, reducing readmissions often takes a multi-faceted approach – an approach that takes longer than 30 days to visualize (McKale, 2014).

Nurse leader-physician bedside rounding was only provided to patients admitted to the internal medicine service. Though the primary service on the project’s medical-surgical floor, the unit also occasionally admits patients to other service lines, including cardiology, orthopedics, family practice, and general surgery. Patients from these service lines were included in the unit’s readmission rate, and if selected by CMS, may have participated in an HCAHPS survey once discharged. Though small in number, these non-internal medicine discharges cannot be adequately captured in the implementation period’s readmission rate or HCAHPS performance.

Conclusion

The implementation of a nurse leader-physician bedside rounding protocol has the potential to positively impact patient readmissions and satisfaction with nursing and physician communication. Incorporating an implementation and evaluation period of at least six months would better demonstrate the efficacy of improved interprofessional collaboration and communication on these selected outcomes. Determination of varying nursing and physician schedules for months prior to implementation will assist in detailed planning of education and implementation strategies to promote better compliance.

Implementation of a nurse leader-physician protocol is inexpensive but has the potential to greatly impact the financial bottom line of the institution through improvement in patient
outcomes. Implementation of the protocol facility-wide could mark improvement in patient satisfaction and readmissions that will lower the risk of CMS reimbursement loss, resulting in significant dollars in cost-avoidance. Also, publicly reported high patient satisfaction scores increase the appeal of the institution, potentially increasing patient visits and revenue.

The implementation of a nurse leader-physician bedside rounding protocol is also important in providing a method for improvement in provider satisfaction. Healthcare workers who feel engaged in decision-making with multiple disciplines often stay longer at facilities and report greater satisfaction within the current work environment (Henkin, Chon, Christopherson, Halvorsen, Worden, & Ratelle, 2016). Happier nurses and physicians often provide higher quality of care, again impacting patient satisfaction and the potential for readmission (Henkin et al., 2016). Though not an outcome measure for this particular project, further data collection in this area will be helpful in improving nurse and physician retention and satisfaction with current employment.
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MEDSURG Nursing, 27(3), 149–152. Retrieved from 

https://www.jointcommission.org/facts_about_patient-centered_communications/
Table 1

Baseline Medical-Surgical HCAHPS Scores – Nursing Communication Domain

<table>
<thead>
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<th>March 2019</th>
<th>April 2019</th>
<th>May 2019</th>
<th>Average</th>
</tr>
</thead>
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<tr>
<td>How often did the nurses treat you with courtesy and respect?</td>
<td>95.80%</td>
<td>73.58%</td>
<td>83.30%</td>
<td>84.23%</td>
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<td>How often did nurses listen carefully to you?</td>
<td>85.27%</td>
<td>68.02%</td>
<td>66.63%</td>
<td>73.31%</td>
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<td>How often did the nurses explain things in a way you could understand?</td>
<td>58.96%</td>
<td>79.13%</td>
<td>62.47%</td>
<td>66.85%</td>
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Table 2

Baseline Medical-Surgical HCAHPS Scores – Physician Communication Domain

<table>
<thead>
<tr>
<th>Question</th>
<th>March 2019</th>
<th>April 2019</th>
<th>May 2019</th>
<th>Average</th>
</tr>
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<tbody>
<tr>
<td>How often did doctors treat you with courtesy and respect?</td>
<td>86.67%</td>
<td>74.98%</td>
<td>88.87%</td>
<td>83.51%</td>
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<td>How often did doctors listen carefully to you?</td>
<td>70.88%</td>
<td>74.98%</td>
<td>84.70%</td>
<td>76.85%</td>
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<tr>
<td>How often did doctors explain things in a way you could understand?</td>
<td>65.62%</td>
<td>74.98%</td>
<td>68.03%</td>
<td>69.54%</td>
</tr>
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</table>
Figure 1

Unit-specific 30-day All-cause Medical-Surgical Readmission Rates

Figure 1. Unit-specific 30-day all-cause medical-surgical readmission rates.
Figure 2

Unit-specific Medical-Surgical HCAHPS Scores in Nursing Communication

*Figure 2. Unit-specific medical-surgical HCAHPS scores in nursing communication*
Figure 3

Unit-specific Medical-Surgical HCAHPS Scores in Physician Communication

Figure 3. Unit-specific medical-surgical HCAHPS scores in physician communication
Appendix A

Author Permission for Use of PATIENT Tool

permission
2 messages

Bonne Johnson <bjohnson@ghs.org>
To: "tsturdivant@southalabama.edu" <tsturdivant@southalabama.edu>

Tyler, yes you have my permission to use the format. Please share your information. Good luck.

Warm regards,

Bonne T. Johnson, DNP, MSN, BSN, RN, CENP
CNO Eastern Region
Prisma Health
Greer Memorial Hospital
830 S. Buncombe Road
Greer, SC 29650

864-797-8001 (office)
864-797-8006 (fax)

Prisma Health
Appendix B

PATIENT Tool for Nurse-Physician Bedside Rounding

P.A.T.I.E.N.T. Tool for Rounding

P – Plan of care discussed with the patient and family.
A – Anticipated discharge/transfer is reviewed with the patient and family.
T – Tests/diagnostic results are discussed with the patient and family.
I – Issues/concerns identified by the patient are resolved.
E – Explanation of medications, diagnosis, and prognosis with the patient and family.
N – Nurse provides feedback regarding assessment and pain control.
T – Thank the patient and encourage patient and family to write down questions.
Appendix C

Daily Instruction Sheet for Process of Nurse-Physician Bedside Rounding

1. Tuesday through Friday, all patients on the 5th floor with an admission date of yesterday, per Cerner, will participate in joint nurse-physician bedside rounding today. On Mondays, patients admitted on Friday, Saturday, and Sunday will participate. Only new admissions will participate in nurse-physician bedside rounding with the resident and a nurse leader.

2. Once new admissions are established, contact the assigned nurse leader when bedside rounding on patients is ready to begin.

3. Utilization of the PATIENT Rounding Tool is required for discussion with patients participating in nurse-physician bedside rounds. All items should be discussed in collaboration by the resident and nurse leader. A copy of the tool is posted in each patient room.

P.A.T.I.E.N.T. Tool for Nurse-Physician Bedside Rounding

P – Plan of care discussed with the patient and family.
A – Anticipated discharge/transfer is reviewed with the patient and family.
T – Tests/diagnostic results are discussed with the patient and family.
I – Issues/concerns identified by the patient are resolved.
E – Explanation of medications, diagnosis, and prognosis with the patient and family.
N – Nurse provides feedback regarding assessment and pain control.
T – Thank the patient and encourage the patient and family to write down questions.

Your cooperation and participation is greatly valued in aims to improve patient satisfaction with nurse and physician communication, reduce unit-specific readmissions, and shorten unit-specific length of stay.
Appendix D

Nurse-Physician Bedside Rounding Protocol Compliance Log

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Admission Date</th>
<th>Nurse Leader</th>
<th>Physician Rounding Date</th>
<th>Patient Concerns?</th>
<th>Nurse Follow-Up?</th>
<th>Family Present?</th>
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*Investigator-derived Nurse-Physician Rounding Log
Appendix E

University of Alabama in Huntsville Institutional Review Board Approval

Date: 4 June 2019

PI: Tyler Strudivant
PI Department: College of Nursing
The University of Alabama in Huntsville

Dear Tyler,

The UAH Institutional Review Board of Human Subjects Committee has reviewed your proposal titled: Implementing and Evaluating a Nurse-Physician Bedside Rounding Protocol to Improve Patient Outcomes and found it meets the necessary criteria for approval. Your proposal seems to be in compliance with these institutions Federal Wide Assurance (FWA) 00019998 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46).

Please note that this approval is good for one year from the date on this letter. If data collection continues past this period, you are responsible for processing a renewal application a minimum of 60 days prior to the expiration date.

No changes are to be made to the approved protocol without prior review and approval from the UAH IRB. All changes (e.g. a change in procedure, number of subjects, personnel, study locations, new recruitment materials, study instruments, etc) must be prospectively reviewed and approved by the IRB before they are implemented. You should report any unanticipated problems involving risks to the participants or others to the IRB Chair.

If you have any questions regarding the IRB’s decision, please contact me.

Sincerely,

[Signature]

Ann L. Bianchi
IRB Chair
Associate Professor, College of Nursing
Appendix F

University of South Alabama Institutional Review Board Approval

### Project Overview

[1449577-1] Implementing and Evaluating a Nurse-Physician Bedside Rounding Protocol to Improve Patient Outcomes

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<td>Implementing and Evaluating a Nurse-Physician Bedside Rounding Protocol to Improve Patient Outcomes</td>
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The documents for this project can be accessed from the Designer.

**Project Status as of: 08/17/2019**

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*Report due: 06/02/2020*

**Package 1449577-1 is: Locked**

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