2015

# Interdisciplinary Bedside Rounding: Patient Satisfaction with Nursing Communication and Decreased Hospital Readmissions

Luanne Parks
*Walden University*

# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Luanne Parks

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Patricia Schweickert, Committee Chairperson, Health Services Faculty
Dr. Robert McWhirt, Committee Member, Health Services Faculty
Dr. Susan Fowler, University Reviewer, Health Services Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2015

Abstract

Interdisciplinary Bedside Rounding: Patient Satisfaction with Nursing Communication and Decreased Hospital Readmissions.

by

Luanne Parks

Bachelors of Science in Nursing, Ferris State University, 1992

Masters of Science in Nursing, Michigan State University, 1999

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

Walden University

November 2015

## Abstract

There is a lack of quality communication among health care professionals and patients in the hospital setting, which can negatively impact patient satisfaction and increase hospital readmission rates. Interdisciplinary bedside rounding (IBR) is a method of rounding that uses direct communication and discussion of the patient at the bedside, and the use of IRB may improve the quality communication among health care professionals and patients. The purpose of this program outcomes evaluation project was to evaluate whether IBR increased patient satisfaction with nursing communication and if IBR decreased hospital readmission rates. The Iowa model of evidence-based practice provided a framework that was used for this project. This program outcomes evaluation used a retrospective pre-post design to collect data 3 months prior to and 3 months following IBR on 1 medical surgical hospital unit. A convenience sample of 42 IBR patient participants was used. HCAHPS scores were used to evaluate patient satisfaction with nursing communication, with a percent of change comparison evaluated. Thirty day readmission rates were evaluated using a hospital based data set and a direct comparison of data was performed. Findings revealed that IBR did not improve patient satisfaction with nursing communication overall. In regards to hospital readmissions, 1% of the hospital readmissions were from the IRB group versus 10% hospital wide. Those who experienced IBR were less likely to return within 30 days. The use of the IBR program and resultant reduced readmission rates show promise for positive social change by improved patient outcomes and decreased health care costs for all.

# Interdisciplinary Bedside Rounding: Patient Satisfaction with Nursing Communication and Decreased Hospital Readmissions

by

Luanne Parks

Bachelors of Science in Nursing, Ferris State University, 1992

Masters of Science in Nursing, Michigan State University, 1999

Project Submitted in Partial Proposal of the Requirements for the

Degree of Doctor of Nursing Practice

Walden University

November 2015

Table of Contents

List of Figures

Interdisciplinary Bedside Rounding: Patient Satisfaction with Nursing Communication and Decreased Hospital Readmissions.

## Introduction

The nursing profession has transitioned from task oriented care to a more complex, diverse attentiveness to the patient and the care environment. The American Association of Colleges of Nursing (AACN) in 2006, highlighted the need for a scholarly approach and commitment to the advancement of the nursing profession. Although grounded in the educational component of nursing advancement to higher levels of professionalism, the AACN recognized that the practicing nurse is faced with demands from an increasingly complex health care system that is in transition towards more accountability in the quality of patient care delivery and outcomes. Nursing responsibilities have expanded technically and holistically, bringing a need for more specialized care and demands for the development of a team-based approach to patient care to improve quality patient outcomes (Falise, 2007). Interdisciplinary care mandates have come from the Joint Commission (2000) and state that patient care, treatment, and rehabilitation should be planned, evaluated, and revised by an interdisciplinary collaborative team.

Interdisciplinary bedside rounding (IBR) is a method of rounding that is done at the bedside, including the patient as well as multiple other professionals like registered nurses, advanced practice nurses, physicians, pharmacists, physical therapists, social workers, and discharge managers (Falise, 2006). During the rounding process, all involved address the patient's plan of care, problem solve any issues, and work with the

patient on daily goals toward the improvement of the patient's health status (Falise, 2007). The complexity of the interdisciplinary conversation, coupled with the need to communicate in a way that the patient can understand and interact with, is a nursing skill learned for this purpose (Gardner, 2005). Nurses can play an active role in the care of the patient through communication, impacting patient satisfaction, and patient outcomes during the rounding process (Falise, 2007). Nursing communication is a key factor in the success of interdisciplinary rounding and can be tied to patient satisfaction with their care and decreased hospital readmissions (Ellerbe & Regen, 2012). In this project, I evaluated a form of interdisciplinary rounding done at the bedside and determined whether this type of rounding improves patient satisfaction with nursing communication and decreases patient readmission rates.

## Background

The Institute of Medicine (IOM, 2001) called for professionals to work collaboratively to improve patient care quality and safety. After 13 years, interprofessional collaboration has yet to become mainstream (Interprofessional Education Collaborative, 2011). According to the Patient Protection and Affordable Care Act (2010), health care workforce shortages necessitate the need for increased collaboration and teamwork across all health professions in order to care for an aging population that has multiple medical conditions (IEC, 2011; IOM, 2010). Key drivers for the future of the health care delivery system include cost, quality, and access (U.S. Department of Health and Human Services, 2009). New Medicaid and Medicare reimbursements to hospitals will be based on a value-based incentive payment program.

Quality is an important component of the Affordable Care Act, and current reimbursement is tied to quality core measure performance and patient satisfaction (U.S. Department of Health and Human Services, 2013). Areas of focus for hospitals that can affect their financial bottom line are preventable readmissions and value-based care (U.S. Department of Health and Human Services, 2009). Because a product of value-based health care is the services rendered, the measuring of health care quality must also include patient perceptions and experiences (Salehi, Strawderman, & Ruff, 2013). Patient satisfaction is a component of value-based care (Bessler, 2012). Quality from a patient's point of view is usually seen as his or her communication with the health care team and the outcomes of their treatment and hospital stay (Bessler, 2012).

The IOM (2001, 2010) has called for the future of health care to have a patient-centered focus. The IOM touted nursing as the best work force in health care to change how health care is designed and to make patient-centered care happen. To reach this goal, nursing must provide care that revolves around the patient as focal point, has been scientifically proven effective, and is conducted with the flare of care that is unique to nursing (Interprofessional Education Collaborative Expert Panel, 2011). Evidence-based care is used to promote health in the medically ill, provide the patient's interpretation of satisfactory care, and instill a quality service on all levels (Kelly, 2011). With the use of evidence-based care, nurses are bringing scientifically researched care to the bedside, and through patient-centered care, are influencing the outcomes of their patients (Robinson, Callister, Berry, & Dearing, 2008). A part of patient-centered care is the nurses' communication with the patient. Meaningful nursing communication with the patient

improves patient satisfaction and can decrease patient readmission rates (Barker, Dressman, & Warden, 2013). Optimizing nursing communication with patients provides a foundation proven to be the key to long-term success (Lee, Rutherford, & Peck, 2008).

## Problem Statement

There is a lack of quality communication among health care professionals and the patients in the hospital setting. With ever more complex patient health conditions, increasing demands for cost-effective care that insist the nurse perform at a more efficient level, and the focus on patient-centered care with patient satisfaction in regards to that care, the nurse is stretched thin (Lusk & Kerry, 2013). The IOM (2001) recognized this dilemma as plaguing not only nursing, but various health care providers, and proposed that patient-centered care be a multidisciplinary, collaborative approach to meet the needs of the patient. A new paradigm in patient-centered care has become necessary (IOM, 2010).

As a new form of patient-centered care, IBR is a means of care where providers from different specialties meet with the patient to communicate, coordinate care, make joint decisions, and manage responsibilities at the bedside with the patient (Gurses & Xiao, 2006). This shared rounding technique manifests in enhanced communication between care providers, especially nurses, and the patient to provide an environment that is conducive to learning and satisfaction not only for the patient, but also the staff involved in the care of the patient (Lee et al., 2008). The nurse plays a part in the IBR process, communicating information from the direct care of the patient and participating in the management of that care (Gurses & Ziao, 2006). IBR has been shown to improve

patient satisfaction, decrease the hospital stay when used in-hospital, and decrease 30-day patient readmission rates (Manojlovich & DeCicco, 2007).

Communication failure has been found to be one of the most frequently cited causes of preventable harm to patients, and the use of interdisciplinary rounds have become mechanisms for communication and coordination of care, improving patient safety (Gurses & Xiao, 2006). Professionals have divergent perceptions of their communication with one another. Communication openness among IBR team members and the patient is associated with an improved understanding of patient care goals, improving patient outcomes (Reader, Flin, Mearns, & Cuthbertson, 2007). In this project, I focused on the evaluation of an IBR program to determine whether it improves nursing communication with patients as evidenced by improved patient satisfaction and 30-day readmission rates.

## Purpose

The purpose of this project was to evaluate if the IBR program at Spectrum Health Zeeland Community Hospital improved the patients' perception of communication with nursing as evidenced by improved patient satisfaction scores related to nursing communication and if 30-day readmission rates decreased in those patients who received IBR.

## Question/Goals/Objectives

Does the implementation of IBR improve patient satisfaction with nursing communication and decrease 30-day readmission rates in hospitalized patients at a community hospital?

Goal 1: To determine if IBR improves patient satisfaction in nursing communication. It was hypothesized that patient satisfaction scores regarding nursing communication will increase.

Objective 1: Patient satisfaction regarding nursing communication was evaluated at 3 months prior to IBR implementation and 3 months after IBR implementation.

Goal 2: To determine if IBR reduces 30 day readmission rates in hospitalized patients. It was hypothesized that those patients who were hospitalized after the IBR process was initiated would be less likely to return within 30 days for readmission.

Objective 2: Thirty day readmission rates of hospitalized patients were evaluated at 3 months prior to the initiation of IBR and 3 months after the initiation of IBR.

## Framework

The Iowa model of evidence-based practice was developed by Titler et al. (2001), and the model is used to show the importance of using research within the context of the health care system, provider, patient, and infrastructure to guide practice decisions (Dontje, 2007; Titler et al., 2001). An evidence-based practice model provides a framework that can be used to transform an organization and foster the use of evidence by interdisciplinary team members (Goode, 2011). Evidence-based practice is a purposeful, conscientious use of the current best evidence, along with clinical expertise and patient values, to improve patient care (Titler, 2001). Through the use of the Iowa model, an evidence-based practice project such as IBR evaluation was completed. The results of that evaluation validated the program effectiveness in the areas of patient satisfaction with nursing communication and hospital readmission rates.

## Definition of Terms

*Community hospital*: A community hospital is defined by the American Hospital Association (AHA, 2013) as nonfederal, short-term, general hospitals. There are 4,973 community hospitals in the United States, with 3,007 of these hospitals being within some type of a system. A system is defined by the AHA as a multihospital or diversified single hospital system. This can consist of two or more hospitals owned by a central organization (AHA, 2013). Zeeland Community Hospital is part of the Spectrum Health System.

*Family-centered round*s: Rounding which incorporates a model of communicating and learning between the patient, family, and medical professionals in a hospital setting (Sisterhen, Blaszak, Woods, & Smith, 2007). IBR at SHZCH incorporates patient and family-centered rounding components.

*Hospitalists and hospital medicine*: A medical specialty dedicated to delivering comprehensive medical care to hospitalized patients (Society of Hospital Medicine, 2009). Practitioners of hospital medicine include physicians and advance practice providers who perform clinical care, teaching, research, or leadership in the field. There are more than 40,000 hospitalists practicing in the United States (Society of Hospital Medicine, 2009). Zeeland Community Hospital uses hospitalist medicine for their medical inpatient services. The IBR program is implemented by the hospitalists.

*Hospital Consumer Assessment of Healthcare Providers and System (HCAHPS) Survey*: The HCQICP (2012) standardized nationally a way to report patient perspectives of care that can enable comparison across all hospitals. The creation of the HCAHPS

survey by HCQICP is the first national, standardized, and publically reported survey of patient perspectives of hospital care. The HCAHPS is administered between 48 hours and 6 weeks after discharge to a random sample of those who have been adult inpatients at a hospital. It can be administered by mail, telephone, mail with telephone follow-up, or active interactive voice recognition (IVR). This survey is done monthly, and at least 300 surveys must be completed over 4 calendar quarters (Centers for Medicare & Medicaid Services, 2012) . These survey questions were key to determining if IBR improves patient satisfaction in this project.

*Interdisciplinary bedside rounds (IBR):* Hospital-based mechanisms of patient care through which care providers from different specialties meet to communicate, coordinate patient care, make joint decisions, and manage responsibilities at the bedside using the ideas of patient-centered rounds and family-centered rounds as their core (Gurses, 2006). It is an exchange of patient data and education that occurs at the bedside with all members of a multidisciplinary team present including the attending physician, nurse practitioners, physician assistants, bedside nurse, charge nurse, respiratory therapist, pharmacist, and the patient with or without his or her family members (Anderson & Todd, 2011).

*Interdisciplinary collaboration*: The sharing of problem solving, planning, goal setting, decision making, assuming responsibility, communicating, openly coordinating, and working together (Gardner, 2005). Interdisciplinary collaboration reflects a dynamic process from a group that synthesizes different perspectives to produce an outcome (Gardner, 2005). There is a lack of shared definition regarding interdisciplinary

collaboration in the literature and interdisciplinary collaboration as a practice norm is rare (Gardner, 2005).

*Multidisciplinary team*: A multidisciplinary team is composed of members from different health care professions who have specialized skills, knowledge, and expertise (Anderson & Todd, 2011). In the IBR process, the members collaborate to make treatment recommendations for the patient that focuses on quality patient care. These team members can include nurses, nurse practitioners, physicians, physician specialists, physician assistants, pharmacists, nutritionists, occupational and physical therapists, speech pathologists, and social workers (Anderson & Todd, 2011; Northern Territory Government, 2013)

*Patient rounding*: The act of seeing a patient in the hospital or another in-patient setting for the purpose of monitoring the patient's health status that day, evaluating the effectiveness of the patient's plan of care, and adjusting the patient's care for optimum health status results (MedicineNet, 2012).

*Patient-centered rounds*: Rounding in which all work is done at the bedside with the patient at the center of the experience (University of Cincinnati, 2013). Patient-centered rounds are a component of IBR at Spectrum Health Zeeland Community Hospital (SHZCH), where this study took place.

*Patient satisfaction*: The determination of patients' perspectives on health care is considered patient satisfaction, according to Hospital Care Quality Information from the Consumer Prospective (HCQICP, 2012).

*Thirty day readmission rates*: Publically reported measure required by the Centers for Medicare and Medicaid Services (CMS). This rate is measured by the CMS as it aims to improve health care quality, the population health in the United States, and to reduce the costs of health care (QualityNet, 2013). Section 3025 of the Affordable Care Act established the Hospital Readmissions Reduction Program that requires CMS to reduce payments to hospitals with excess readmissions (CMS, 2013). The readmission rate is composed of those who were discharged from an inpatient stay at a short-term acute care hospital and is based on any unplanned readmissions, for any cause, within 30 days of that discharge (QualityNet, 2013).

## Assumptions

It was assumed that obtaining data from the HCAHPS survey for patient satisfaction with nursing communication at 3 months post IBR initiation provided a representative sample and data regarding the effectiveness of the program. Data regarding 30-day readmission rates are also tracked within the hospital system complex and are detailed specifically to the patient via his or her financial number. It was assumed that these data were accurate. These data assisted in providing clear evidence of hospitalist program patients. It is also assumed that IRB was effective at improving patient and nursing communication, as well as show evidence of this impact through an increase in the HCAHPS survey results regarding patient satisfaction with nursing and through a decrease in the 30-day readmission rates.

## Limitations

IBR as a tool to improve patient/nurse communication could increase awareness of the need for improvement in nursing communication with the patient and encourage more nurses to improve their communication with their patients all around, thus improving patient satisfaction with nursing communication in areas not specific to IBR. This could be considered a limitation to this project. Limiting the evaluation to 3 months prior to IBR implementation and 3 months after implementation should enable any effect of IBR to be seen. Another limitation considered was that only some of the discharged patients may choose to return surveys, and this may not reflect the general population served. The IBR process itself has specific criteria for its use. IBR is not done if the hospitalist census is above 18. It is not done on any new admissions or planned discharges for that day. If an unforeseen issue arises that takes the providers' time, IBR will be cancelled for that day. These unplanned changes in the IBR process may affect the consistency of the IBR program, and it was important to conduct this evaluation to determine the effects of an IBR program in day-to-day practice.

## Evidence-Based Significance of the Project

For the advanced practice nurse who is doctorate prepared, AACN Essential II (2006) described the need for organizational and systems leadership that focuses on practice, the improvement of health outcome, and patient safety. In evaluating the IBR program for effectiveness in patient satisfaction with nursing communication and hospital readmission rates, I used the skills learned in this area at a doctorate level and applied

them in a meaningful manner. The evaluation of this care delivery approach demonstrates that IBR meets current and future needs of the hospitalized population (AACN, 2006).

The practice of IBR brings together the health care team and the patient in a way that facilitates health care learning, practice, and positive outcomes (Falise, 2007). This form of care can bring forth a new level of expectation for all involved, elevating health care to a new practice level of accountability (Barker et al., 2013). Evaluation of the IBR outcomes, including nursing communication and 30-day readmission rates, may validate this new level of care.

With increasing focus on the cost of health care, more efficient ways of providing quality care that saves money are at the forefront of evidence-based care practices (Curtis et al., 2006). IBR evaluation of 30-day readmission rates shows that a team-focused rounding that includes the patient can save money. This may be identified through a decrease in 30-day readmission rates. The Medicaid and Medicare system does not reimburse hospitals for patient readmissions if they are within 30 days of original stay for the same illness. Thus, decreasing the number of patients who are readmitted during that time can have a financial impact (O'Leary, 2012).

## Implications for Social Change in Practice

Communication between nurse and patient is key to establishing relationships, providing improved patient care, and creating positive outcomes (Pauley, 2010). This is exemplified in patient rounding. Patient rounding has taken many forms over the years. From individual rounds, the value of the rounding experience depends on what the end expectations are for the patient, provider, and the organization. As health care has

evolved, increasing expectations have been made. Patient satisfaction is becoming increasingly important with regards to patient returns to the hospital for further care and reimbursement rates (CMS, 2010). Readmission rates depict the quality and thoroughness of the care given at the original hospital stay. IBR incorporates these evolving concepts into a way that may improve the care given to patients and enhance cost containment by decreasing readmission rates (CMS, 2010). An unevaluated social change could occur as IBR allows patients and hospital caregivers to work on the same team, each with their own voice, and patients having this form of health care as an expectation instead of a novel idea.

The American Nurses Association (ANA, 2010) identified nursing standards of practice. Among these standards, Standard 10 depicted what is expected in quality of practice (ANA, 2010). Within this standard is the competency to evaluate clinical care or health services through the use of interdisciplinary teams (ANA, 2010). IBR and the evaluation of patient communication is an example of this competency. The knowledge gleaned can further nursing's strategy of quality nursing practice.

Standard 11 of the ANA's standards includes the need for the nurse to communicate effectively in a variety of situations and areas of practice (ANA, 2010). Within this standard, the competencies include the need to seek ongoing improvement in communication skills; to communicate accurately to consumers, family, interprofessional teams, and others; and to maintain communication with other providers to promote quality patient care (ANA, 2010). IBR is based on interdisciplinary communication with the patient. The evaluation of the patient's perception of nursing communication plays a

role in validating the use of this skill in the improvement of nursing competencies regarding effective communication. The use of IBR as an effective new communication tool for nursing may improve the patient care experience and nursing competency in communication.

## Summary

There is inferior communication among health care professionals, including nursing, and the patient in the hospital setting. The purpose of this project was to evaluate if the IBR program at SHZCH improved the patient's perception of communication with nursing as evidenced by improved patient satisfaction scores related to nursing communication and by 30-day readmission rates decreasing in those patients who receive IBR. The Iowa model of evidence-based practice was used as a framework for this project. Assumptions for this project included that the data were a representative, accurate sample. Limitations included unplanned changes in the IBR process that may affect the consistency of the program itself. The significance of this project included an evidence-based application, AACN Essential II (2006), that describes the need for organizational and systems leadership that focuses on practice, the improvement of health outcome, and patient safety. Implications for social change are focused on the ANA's 2010) standards of practice that include competencies that focus on interdisciplinary care and nursing communication to promote quality care. The following section presents a review of scholarly evidence regarding IBR.

## Section 2: Review of Scholarly Evidence

### Introduction

The lack of quality communication among health professionals, including nursing, and the patient in the hospital setting can negatively impact patient satisfaction and hospital readmissions. The purpose of this project was to evaluate if the IBR program at SHZCH improves the patient's perception of communication with nursing as evidenced by improved patient satisfaction scores and a decrease in 30-day readmission rates change in those patients who received IBR. In this section, I will address the literature search strategy and the framework used for this project. A comprehensive review of the literature will be identified. I will discuss interdisciplinary rounding in various contexts, including interdisciplinary bedside rounding. Evaluation of these programs will be discussed as literature findings allow.

### Literature Search Strategy

Boolean string words used in this search included the following: *collaborative care*, *interdisciplinary bedside rounding*, *hospital rounding*, *interdisciplinary rounds*, *interdisciplinary care*, *patient satisfaction*, *hospital care*, *nursing communication*, *patient satisfaction*, *thirty day hospital readmission rates*, and *HCAHPS*. This literature review was conducted using Medline, CINAHL, Cochrane, PubMed, Nursing & Allied Health Source, and Ovid data bases. Various governmental and professional Internet sites were used as a source of program specific data. These included the following: The American Hospital Association, Centers for Medicare & Medicaid Services, the Health Research &

Educational Trust, The Institute of Medicine, The Interprofessional Education Collaborative, Institute for Healthcare Improvement, The Society of Hospital Medicine, The U.S. Department of Health and Human Services, and The University of Cincinnati. Search parameters included articles published within the last 10 years. Twelve articles were obtained from these sites for use in this review. In total, 43 articles were used.

## Project Model

The Iowa model of evidence-based practice provides a framework that can be used to transform an organization and foster the use of evidence by interdisciplinary team members (Goode, 2011). This model has been exemplified as one of the most successful models for promoting change in nursing practice at the hospital or organizational level (Kowal, 2010). Spectrum Health (SH), in the promotion of Magnet status, has adopted the Iowa model to help advance evidence-based nursing research and practice in their health care system.

The Iowa Model uses key triggers, either problem- or knowledge-focused, that can lead the clinician in the usage of the components of the model (Baur, 2010). Step 1 involves formulating a question. The question is triggered through identification of a problem or through new knowledge. Step 1 question formulation: Does IBR improve patient satisfaction with nursing communication and decrease readmission rates? Step 2 of the process determines the relevance of the question to organizational priorities. This project is relevant in the gaining of knowledge as to whether IBR is effective at improving patient satisfaction with nursing communication and to decrease 30-day readmission rates. Step 3 is used to determine if the evidence answers the question

through a review of the literature. There is a foundation of knowledge that supports bedside rounding in various forms. Once data were synthesized, I determined if there was enough evidence to support a practice change. The change in practice can be tested in a pilot study (Krom, 2010). Evaluating the effectiveness of the program is essential to supporting the program's maintenance and growth (Manojlovich & DeCicco, 2007). Step 4 includes sharing the outcomes of the practice changes with others (Baur, 2010). The sharing of the results of this project will be done through Spectrum Health's Nursing Research Department annual poster session and a poster session at the annual American Association of Nurse Practitioners conference. The final step is to evaluate the outcomes for the purpose of establishing whether Step 1 of the model should be re-engaged (Baur, 2010). In considering this project, dissemination of the information and evaluation of the project will conclude its focus. Once IBR evaluation results are disseminated, a re-evaluation of the program regarding the Iowa model's problem-focused triggers and knowledge-focused triggers can be made by stakeholders to determine if goals have been met, new data are available to improve the program, and if the IBR process needs improvement.

## Literature Review

### Specific Literature

Hospitalized patients want a patient-centered approach with communication and partnership (Little et al., 2001). Patient satisfaction with a focus on excellence, instead of merely satisfaction, keeps patients loyal to a hospital allowing that hospital to prosper (Otani, 2009). Otani (2009) stated that a driver of overall patient satisfaction in the

healing process is nursing care excellence in the satisfying of the patient's need for effective personal care. Nursing communication affects patient needs and outcomes such as anxiety, adherence to treatments, and satisfaction with care (Sheldon & Ellington, 2008). Nursing communication that positively affects patient satisfaction includes rounding with scripting and bedside reporting (Downs, Standish, & Allred, 2012). Kelleher, Moorer, and Makic (2012) reported that peer-to-peer nursing rounds at the bedside improved the frequency of preventative interventions, as evidenced by the decreasing of patient pressure ulcers in surgical intensive care patients. This, in turn, improved patient outcomes, shortened the patient stay, and saved health care dollars (Kelleher et al., 2012). These findings support a patient-centered, collaborative approach with a focus on communication and patient satisfaction to improve patient outcomes.

With the need to accomplish more in less time with satisfied patients and positive outcomes, health care providers have focused on bedside rounding with an interdisciplinary focus (Chapman, 2009). MacDavitt, Cieplinski, and Walker (2011) claimed that IBR allows nurses to have a voice in patient decision making, improving nursing job satisfaction and improving the quality of patient care through improved communication and patient satisfaction. Anderson and Todd (2011) surveyed a multidisciplinary critical care team for their preference between team rounding in a conference room or at the bedside. Overall, the team preferred bedside rounds. Ninety percent of participants found that there was a lack of adequate space for the rounding team; sixty five percent felt it was a violation of HIPAA regulations, and only 30% felt that bedside rounds facilitated computer order entry (Anderson & Todd, 2011). The

benefits were identified with 94% of participants who felt that bedside rounding improved communication; forty nine percent identified improved clinical management and 72% of participants felt there were improved consultation services (Anderson & Todd, 2011).These review findings support the use of collaborative, interdisciplinary care at the bedside for improved provider interaction in the patients' care.

A structured rounding system that works well for all involved was identified as an important factor in interdisciplinary rounding. LeFrancois and Leung (2013) found that IBR strategies that engaged the patient in a thoughtful, compassionate, and focused way with a shared decision-making approach were more preferential to patients than an authoritarian presentation. LeFrancois and Leung suggested that added strategies in regards to bedside rounds that are well defined, prepared, and applied can move health care in the right direction towards patient-centered management. Halm (2003) described the process used in one institution to expand existing discharge planning rounds to interdisciplinary rounds. The goal of Halm's project was the interdisciplinary attempt at the sharing of pertinent patient information, brainstorming difficult patient problems, identifying barriers to patient care and discussing potential solutions, and identifying individual and team learning needs. In their evaluation of the project, Halm admitted that the measuring of outcomes regarding their rounding program was a challenge, touting that complications and patient pathway variances directly influenced the effective evaluation of the rounding process and that the outcome measures of interdisciplinary rounds are multifaceted. Halm described difficulty in convincing nurses and physicians of the value in the rounding process initially. After 6 months of rounding, staff in this study

did have improved feelings of value for the program, and patient satisfaction was increased; however, they did not round at the bedside (Halm et al., 2003). Chung (2005) found that patients who were rounded on by the interdisciplinary team had improved satisfaction, especially in pain control. These findings support interdisciplinary rounding done in a structured manner.

Interactive, collaborative rounding with a patient focus and open communication improved patient satisfaction. Parisi (1994) identified that timely communication among the patient and health care workers through interdisciplinary rounding was beneficial to the promotion of quality health care and patient satisfaction. O'Leary (2012) presented an assessment of teamwork during interdisciplinary rounds on medical units and highlighted the importance of the team interaction towards the improvement of collaboration and interdisciplinary round success. Cox (2011) described the outcomes of family-centered bedside rounding by medical students, concluding that patients and their families had increased satisfaction with their stay. Kuo et al. (2012) examined the association of family-centered rounds with family experiences and health service use and found that family-centered rounds were associated with higher parent satisfaction, with additional studies needed to assess the function of family-centered rounds in different settings. Phipps et al. (2007) attempted to identify if the presence of family at the bedside during pediatric rounding was important to patient education and found no significant difference regarding whether family was present or not, but did find that patient and family satisfaction increased. The findings suggest that open communication during interdisciplinary rounding can increase the satisfaction of patients' and families.

Thirty day readmission rates may be affected by interdisciplinary rounding. (2011) examined 30-day readmission rate data from the U.S. Department of Health and Human Services and compared it to HCAHPS survey data and found that those patients who reported satisfaction with their inpatient care and the discharge process during their hospital stay were less likely to be readmitted within 30 days. Falise (2007) examined interdisciplinary rounding in the critical care unit and evaluated objective, patient-specific findings that included 30-day readmission rates, all of which improved with interdisciplinary rounding. Comparing traditional rounding with interdisciplinary rounding, Wild (2004) evaluated an interdisciplinary rounding program and found no improvement in length of stay of telemetry patients or readmission rates, but suggested that interdisciplinary rounding needs further study in different settings. Thompson (2010) evaluated the use of interdisciplinary rounding on heart failure and palliative care patients and found that patients, family, and staff benefited from the experience. More study was needed in the areas of readmission rates, symptom control, and satisfaction with care (Thompson, 2010).

Multiple studies address quality improvement, patient care, and outcome assessment (Cox, 2011; Curtis et al., 2006; Halm, 2003). When initiating a program focused on quality improvement, evaluative steps need to be taken to ensure program success and positive outcomes. A key step in this is taking an approach to evaluating the targeted change. Without a formal evaluation, it is impossible to judge the program's success and sustainability (Curtis et al., 2006). Bharwani, Harris, and Southwick (2012) evaluated medical interprofessional rounds and observed that medical teams formed work

groups instead of working teams, with parallel interdependence instead of the preferred reciprocal interdependence. Individuals worked alone and assumed that their work would be coordinated with other caregivers versus individuals working together to actively coordinate patient care (Bharwani et al., 2012). High-performance businesses are based in working together as teams, and health care professionals should do the same to improve performance as a whole.

Various studies evaluated nursing communication and readmission rates. The evaluating of IBR to determine if nursing communication can influence patient satisfaction and reduce readmission rates has been seen in Townsend-Gervis, Cornell, and Vardaman (2014). Townsend-Gervis et al. focused on daily interdisciplinary rounds on the medical/surgical unit and the impacts of situation-background-assessment-recommendation (SBAR) communication from the nurse during those rounds. Townsend-Gervis et al. found that readmission rates decreased significantly. Patient satisfaction improved, but was not significant (Townsend-Gervis et al., 2014). The Health Research and Educational Trust (2012) demonstrated regular rounding in partnership with the patient that included effective nursing communication improved patient satisfaction and decreased hospital readmission rates. Nursing communication with the patient can improve patient satisfaction and decrease readmission rates in the hospitalized patient in those patients who participated in IBR.

**General Literature**

The IOM (2001) identified a health care system that is overly complex and uncoordinated, with cumbersome processes that stifle the ability to give appropriate, timely, and safe care to patients. The IOM called for a redesigning of the health care system, including putting the patient as the source of control for his or her own health care, using evidence-based care that is safe, and attending to the needs and values of the patient. A priority was placed on the ability of clinicians to collaborate and communicate actively and effectively to coordinate patient care and share information (IOM, 2001). The U.S. Department of Health and Human Services launched *Healthy People 2020* (HP, 2020) in 2010. HP 2020 promoted four goals for the people of the United States that included the following: the ability to live longer, high-quality, disease free lives; to eliminate health disparities and improve the health of all groups; to promote physical and social environments that promote good health; and to promote healthy behaviors that allow for a quality of life across all ages and stages of life. Seeing these goals become a reality involve knowledgeable, caring providers who can be trusted by the patients and who are willing to provide services where they are needed. These goals coincided with a new health care plan, called the Affordable Care Act (year), to support such endeavors (U.S. Department of Health and Human Services, 2010).

With the signing of the Affordable Care (2010) act, an opportunity for effective change arose in the redesigning of the health care system in the United States (IOM, 2010). The IOM (2010) called for nurses to become full partners with other health care professionals, including physicians. With nursing being such a large, adaptive, and

capable workforce, the IOM postulated that nurses are in the ideal position to potentiate wide-reaching, positive changes in the health care system. To do this, nurses will need to reconceptualize what they are and what they do (IOM, 2010). In 2012, individuals from the IOM and other institutions came together to promote the acceleration of interprofessional team-based care as a response to the changing health care system (Mitchell, Wynia, Golden, McNellis, Okun, Webb, Rohrbach, and Von Kohorn, 2012). This consortium's goal was to identify basic principles and expectations of participants in the care process in a way that would guide coordinated collaboration among health care professionals (Mitchell et al., 2012). Ideas were presented that focused on efficient ways to accelerate implementation of effective team-based care (Mitchell et al., 2012). Mitchell et al. (2012) provided evidence-based theoretical data and called for immediate and significant investment in the area of interprofessional team-based care to promote a needed change in U.S. health care. These findings support the need for effective team-based care such as IBR.

The severity of patient illness and the complexity of information and care management have steadily increased over the years. The effective management of patient care has become increasingly important, especially now that patients are more informed and care is becoming outcome-driven (Yeager, 2005). The IOM (2001) explored the need to create environments that enable safe passage of the patient through the health care system. With the understanding that no single care provider can support the complexity of care, the IOM suggested the need for an interdisciplinary clinical practice. Yeager (2005) stated that interprofessional collaboration has the potential to be a catalyst for

professional development and is a feasible way to support the complex care issues that surround the patients of today. Interdisciplinary clinical practice involves provider understanding that each discipline has an important contribution to make in regards to care delivery (Yeager, 2005). A collaborative environment includes the ability for each participating care giver to freely use his or her skills, expertise, and clinical judgment when planning and instituting the care to the patient. These joint ventures include shared responsibility, power, and recognition in the health care decision making based on the participant's abilities (Salipante, 2002).

The health care environment of today has heightened the importance of successfully improving customer satisfaction and patient outcomes (Ellerbe & Regen, 2012). Patient anxiety is decreased through patient engagement, and patient-centered education reduces the patient's fear and uncertainty, which are factors associated with hospital readmissions (Silow-Carrol, Edward, & Lashbrook, 2011). An interdisciplinary approach to patient engagement includes the patient, nurses, pharmacists, social workers, and physicians, among others. Silow-Carroll et al. (2011) contended that decreased hospital readmission rates are related to clinical excellence that includes an investment in quality improvement strategies such as evidence-based care and attention to the smooth care transitions as patients are discharged, suggesting that interdisciplinary attention be paid to the discharge process throughout the patient's hospital stay with frequent communication across the care team. The interdisciplinary contribution, when focused on patient engagement, has been shown to decrease 30-day readmission rates (Silow-Carroll et al., 2011). The heightened attention in patient engagement through interdisciplinary

collaboration may have contributed to a decline in hospital readmission rates by the end of the year 2012 (Wood, 2013). These study findings suggest that clinical excellence include interdisciplinary care as a quality improvement strategy to improve readmission rates.

Studies reveal that collaborative care is necessary, but there is no structured education to assist providers in an evidence-based approach to the initiation of such care. Newhouse and Spring (2010) pointed out that although collaborative care is a worthy goal, there is little educational preparation currently available to institute such a program. Conceptual development and capacity building need to occur for the vision of interdisciplinary evidence-based practice to occur. Care givers need to build skills to participate effectively. Newhouse and Spring suggested that nursing curriculum needs to support this process. Newhouse and Spring failed to incorporate other fields of health care into their discussion, however, including the need to have discipline specific curriculum regarding interdisciplinary evidence-based practice as well. Kilgore and Langford (2009) expressed the same sentiment, with the educational development of team individuals proposed as a means to enhance collaboration among team members in an effort to reduce the risk of team failure. Teams must overcome the barriers of their own disciplines to reach a level of mutual understanding and readiness to respond to the needs of the patients. These studies reveal that structured education regarding collaborative care and a team approach is a goal that needs further development.

## Background and Context

The site for this IBR evaluation was Spectrum Health Zeeland Community Hospital. SHZCH is a community hospital located in Zeeland, Michigan and is part of a larger hospital complex, Spectrum Health. Spectrum Health is a not-for-profit health care system based in west Michigan with 11 hospitals, 170 ambulatory sites, 1080 physicians, and has 21,400 employees. Zeeland Community Hospital has 57 beds, 250 physicians, and employs 425 people. The average daily medical/surgical census at SHZCH was approximately 14. These patients were seen by the hospitalist service, which provides 24 hour care for admitted patients (Spectrum Health, 2013).

I have been an employee of Spectrum Health for six years, two of those years at the Zeeland Community Hospital site. During that time, I have worked as a nurse practitioner for the hospitalist service on the night shift. I was part of the initiation of the IBR program, creating various evaluation tools for the hospital. I worked closely with the hospitalist medical director and the director of nursing in the evaluation of patient satisfaction specifically with the program. The evaluation tools I created then are not included in this project. This doctorate project used HCAHPS scores and internal statistical data which was collected and managed by others within the Spectrum system.

## Summary and Conclusions

The lack of quality communication among health professionals, and the patient in the hospital setting can negatively impact patient satisfaction and hospital readmissions. With the guidance of the Iowa model, the purpose of this project was to evaluate if the IBR program at SHZCH improved the patient's perception of communication with

nursing and to evaluate if thirty day readmission rates changed in those patients who received IBR. As a result of the literature review, various studies were found that discussed interdisciplinary rounding or bedside rounding. Most focused on one or the other, but not both. Many journal articles on this topic were found to be descriptive, and/or qualitative in their data findings, and more evaluative in their results. Little quantitative work regarding IBR and the evaluation of IBR was found. With this in mind, one must consider this literature review as an investigation into the existing topics available.

# Section 3: Approach

## Introduction

The purpose of this project was to evaluate if the IBR program at SHZCH improved the patient's perception of communication with nursing as evidenced by improved patient satisfaction scores and decreased 30-day readmission rates change in those patients who received IBR. Conducting optimal evaluations is essential to the supporting of effective programs and determining those that are not effective (Centers for Disease Control and Prevention, 2005). This project was a program outcomes evaluation. An outcome is considered a change in a patient's current and future health status that can be attributed to health care that was provided to the patient (Kelly, 2011). In this project, I retrospectively evaluated nursing communication with patients through HCAHPS nursing communication scores and 30-day readmission rates 3 months prior to the initiation of the IBR program and 3 months after the initiation of the IBR program to assess the effectiveness of the IBR program. For nursing communication scores, this was a percent of change comparison. For readmission rates, a direct comparison of data was performed.

## Approach and Rationale

### Design and Methods

Communication with nurses is a category of the HCAHPS that includes the patient's perception of the nurse's courtesy and respect, listening, and explaining skills (CMS, 2013). It is a nursing specific category. During IBR, nurses report on the patient's condition and any changes that have occurred within the last 24-hour period. Daily goals

are made and any specific questions regarding that patient's care are presented and problem solved with the IBR team, including the patient and the nurse. Therefore, the nursing communication score on the HCAHPS survey will reflect any impact of IBR on nursing communication. The nursing communication scores were compared for 3 months before IBR implementation and 3 months after IBR implementation, with the percent of change in these numbers reported.

Readmissions were a direct comparison, using an encoded database to ensure patient privacy protection, of the readmission data and IBR participation data to determine returning patients who participated in IBR. These data provided the direct number of patients who participated in IBR and returned within 30 days with the same diagnosis. This evaluation was focused on the readmission rates of those who participated in IBR 3 months after the initiation of IBR.

**Population/Sampling**

Population is described as a group of individuals having common characteristics (Polit, 2010). The representative population sample for this evaluation was medical/surgical patients on the hospitalist team service at SHZCH. These patients had experienced care at SHZCH at some point in time from January 1, 2013 to July 31, 2013.

This project took place at SHZCH. The medical/surgical unit was the specific site. IBR began at 10:00 a.m. every week day that the total hospitalist census was less than 20. Patients who were seen by the hospitalist service and were not going home that day were included in IBR. The nurses participating in the IBR program included medical/surgical nurses who were working between the dates of January 1, 2013 and July 31, 3013. Nurses

who provided care during the day shift were most directly involved in IBR. Other shift nurses also contributed via report to the day shift nurse regarding patient-related questions or concerns. The other shift nurses also continued the IBR daily goal focus and care. This represents a total of 23 registered nurses. All nurses were oriented to the IBR process prior to initiation of the IBR program. This orientation included scripted practice regarding the presentation of issues during IBR that occurred within 2 weeks of the initiation of the IBR program with pretesting and posttesting to ensure competency.

The population included those patients, 18 years of age or older, who were patients in the medical/surgical unit at the time of 3 months before the initiation of IBR and 3 months after IBR implementation. Within those parameters, this was a population sample of convenience. This population group carried a variety of disease diagnoses like pneumonia, congestive heart failure, diabetes, chronic obstructive pulmonary disease (COPD), pancreatitis, acute kidney failure, diverticulitis, and cellulitis.

Patient satisfaction was sampled via the HCAHPS. HCAHPS data were conducted through a random sampling by an independent company, Press Ganey. It is month specific. The results were publically and institutionally presented. The survey was administered between 48 hours and 6 weeks after the patient was discharged from the hospital and was given to a random sample of those who have been adult patients at the hospital. SHZCH is a low-volume hospital, so all their discharge patients received the survey. The survey was administered by mail, telephone, mail with telephone follow-up, or active interactive voice recognition (CMS, 2012). The survey was barcoded with information that was scanned into the Spectrum system when it was returned. These data

do not reveal the individual person, but do provide the date of service and the attending physician. The data then were used to identify specific month of admission data. These data were obtained at the point of 3 months before the institution of IBR and 3 months after it had been in place. The average number of patients sampled at SHZCH Medical/Surgical Unit per month was 138 (Spectrum Health, 2013). This number was also the average monthly census.

Thirty day readmission rates were a percent report of actual patients during a specific time who had come back to the hospital as patients (QualityNet, 2013). It was categorized by patient financial number. These data were obtained for 3 months before IBR initiation and 3 months after. Patient identifiers were removed and a database using a study code system was applied. The use of study codes is a method for protecting the confidentiality of research participants by creating a unique study identification number. Data using study codes were then kept in a separate location from the data with patient identifiers (Moore, 2014). This information was stored by the unit clerks at the hospital in a locked cabinet in a locked room. A database of patients who had experienced IBR was created from this stored information. Patient identifiers were removed during the process, and the study code system that was used with these data protected confidentiality.

**Human Subjects Protection**

After approval of this project by Walden University committee members, it was evaluated by the Spectrum Health and Walden University Institutional Review Board (IRB) prior to implementation and approvals were granted. In 1991 federal policy mandated the establishment of IRBs to protect human subjects in research activities

(Terry, 2012). This evaluation project was not a research project that involved an intervention or interaction with individuals. IBR was already a hospital process. In this project, I evaluated the IBR process using data obtained through state-mandated reporting resources of existing data and internal data with patient identifiers in the context of Financial Identification Number (FIN) numbers. These data were organized with the use of a study code system. During database building, a unique study identification number was assigned to each FIN number. Any demographic data that may have been identified were attached in the database to that individual study number. The data were safeguarded by a password secure computer database, located at the hospital in a locked room. I alone had access to the data during data entry and analysis. Disposal of the data into hospital-specific, HIPPA approved lock boxes will be done per hospital policy upon the completion of the project. No other patient identifiers are present. No contact with patients occurred.

## Data Collection

In this retrospective program evaluation, I compared HCAHPS results for the months of January and July, 2013, along with 30-day readmission rates during the same time frame. These data came from various sources including the HCAHPS database, the Spectrum quality assurance database, and records kept by the unit clerks on the medical/surgical unit of those who participated in the IBR program. Compilation of the data was done by me.

**Patient Satisfaction Data**

HCAHPS data were kept in a database by the director of nursing (DON) at SHZCH. Monthly reports were created by the Spectrum Health Center for Exceptional Experiences and reflected monthly percentages regarding patient responses to the HCAHPS survey. HCAHPS patient answer options were reported in top box which means that the response by the patient was *always*. The middle box captured intermediate responses to survey items answered as *usually*. The bottom box is the least positive response and reflected the patient reporting *sometimes* or *never* on the survey (Hospital Consumer Assessment of Healthcare Providers and Systems, 2012). HCAHPS data were reported at SHZCH as the top box percentage of the total number of surveys returned, or those patients who were surveyed that responded *always* to the question regarding nurse communication with the patient. These data were comprised of three questions asked of the patient to get an overall response regarding communication with nurses: (a) How often did nurses treat you with courtesy and respect, (b) How often did nurses listen carefully to you, and (c) How often did nurses explain things in a way you could understand? (HCAHPS, 2012). The months of March and May were identified through a database managed by the hospital's DON, and a report of the communication with nurses overall category for patients initially hospitalized during those months was generated to provide a percent of patients surveyed who were in the hospital on the medical/surgical unit at that time. Patient identifiers are excluded from this report, with the more specific data kept with the DON on the main database.

**Thirty Day Readmission Data**

A listing of hospitalist team patients present in the hospital who had and had not participated in the IBR program was preserved by the medical/surgical unit secretaries at SHZCH in a locked cabinet. These data were from a daily listing generated by the unit secretary that was given to the hospitalist and nursing teams for use as a guide for their IBR rounds. The data had the patient's FIN and whether he or she participated in IBR; these data were cataloged by the date of IBR participation. After project approval was obtained through the IRB process, I put those data were put into a database for analysis. The database had an assigned identification number to each patient datum. The original data were returned to the locked cabinet once the database was complete. This completed database gave information as to who participated in the IBR program. These data were then compared with 30-day readmission data to determine if any patients who experienced IBR returned within 30 days.

Listings of patients who had been readmitted within 30 days of discharge was obtained from the Spectrum Health Quality Assurance database. That database identified all patients in the Spectrum Health systems who had been readmitted within 30 days. The system identified patients by their hospital FIN, date of original admission, and date of readmission. Also included were the days between readmission, the original admission diagnosis code, and the readmission diagnosis code. To protect patient privacy, patient identifiers were removed, and a study code system was used in the creation of a database to review these data. Once this proposal was approved by IRB, these data were released to me for comparative evaluation. A direct comparison using Excel of the readmission

data and the IBR participation data determined returning patients who participated in the IBR program.

## Data Analysis

A database using Excel was created from the data that was held by the unit secretaries in regards to those who had participated in IBR. Those data were categorized by study code numbers and the dates of IBR participation in the Excel database. I did input all data. The data were secured in a hospital-specific computer that allowed access only to me via a password. This database was used as comparison data with the 30-day readmission rate data to determine those who experienced IBR who had returned within 30 days for the same condition in July, 2013.

### Patient Satisfaction Data

Spectrum Health Center for Patient Experiences reports the HCAHPS results regarding patient satisfaction. Specifically looked at was the communication with nurses overall category. I determined the results of this evaluation process by a retrospective comparison of HCAHPS scores presented in percent format directly from the HCAHPS reporting database in the care of the DON. These data were evaluated according to date of service in its present database form. Because no IBR was implemented from January 1 through March 31 of 2013, baseline data were used from the HCAHPS database regarding patient satisfaction with nursing communication. July 1, through July 31, 2013 data were referenced against the IBR database to determine whether any of those surveyed participated in the IBR process. Normal fluctuations in HCAHPS' patient satisfaction in this category have historically ranged from 70 to 82% at SHZCH

(Spectrum Health, 2013). The low point of this SHZCH category was 1 month prior to the initiation of IBR at 70%. The national benchmark for meeting HCAHPS' expectations is 81 to 84% (CMS, 2012); any result greater than 84% at the 3-month, post-IBR evaluation exceeds national benchmark expectations and was considered a success regarding the hypothesis that IBR improves patient satisfaction in this category.

**Thirty Day Readmission Rates Data**

Thirty day readmission rates for the medical/surgical unit for 3 months prior to the initiation of IBR and 3 months after the IBR start date was obtained from the Spectrum Health readmission data base. This information lists the patient's original admitting diagnosis and his or her readmission diagnosis. Patients may return to the hospital for unrelated reasons such as elective surgery, chemotherapy, radiotherapy, against medical advice (AMA) discharges, or transfers to another acute care hospital (Spectrum Health, 2013). Those patients were not considered for this evaluation. Using Excel, the readmission patients with the same admitting diagnosis for both admissions were identified. This corrected dataset is the dataset that was used to determine whether returning patients had experienced IBR. A comparison of datasets, the corrected 30-day readmissions, and the lists of those patients who experienced IBR occurred. The number of readmissions of those patients who received IBR was determined by the use of their study code numbers. A successful hypothesis regarding if IBR reduces 30-day readmission rates was reflected if less than half of the patient readmissions were those who had experienced IBR. A comparison took place of the readmission rates from a pre-IBR time frame of January, 2013 and a post-IBR timeframe of July, 2013. That provided

information whether IBR has decreased readmission rates overall. Because this was only two numbers, one before and one after the initiation of IBR, direct comparison took place. The hospital's 30-day readmission rate averaged in 2013 prior to IBR rounding, near 6%.

## Project Evaluation Plan

In this project, I evaluated two factors in an effort to identify IBR's effectiveness using the Iowa model as a guide. Evaluation is a built-in component of the Iowa model. It is considered an important part of evidence-based care to promote quality. Process and outcome indicators are considered part of the evaluation plan (Titler, 2001).

Process evaluation is used to assess the delivery of the project. Process evaluation is used to verify what the project is and whether it is being implemented as designed (Bliss & Emshoff, 2002). It evaluates what the project intended to be, what was really done, and whether there were any gaps between program design and delivery (Bliss & Emshoff, 2002). In this instance, process evaluation was specific to my evaluation of the IBR program with a focus on patient satisfaction with nursing communication and 30-day readmission rates. The process evaluation of this project was reflected in the finalization of the project through the discussion and implications of the findings. Areas of process evaluation include whether the design of the project brought about the findings in a clear and scientific manner and if the project reflected a bias of execution or findings.

Outcome evaluation is used identify whether the program has accomplished its goals (Friis & Sellers, 2009). This is different from the other forms of evaluation, with this focus being the effectiveness of the project in effecting change (Linnell, 2013). The

outcome evaluation is used to examine whether the long-term goals from the project had been obtained. It can also be used to identify if any unintended outcomes occurred (Hodges & Videto, 2010).This evaluation occurred at the completion of the project and was incorporated in the discussion and implications. The outcome evaluation included whether the hypothesis regarding patient satisfaction and 30-day readmission rates was proven positive.

## Summary

In this retrospective, program evaluation project, I determined whether patients who experienced IBR had increased satisfaction with nursing communication and reduced 30-day hospital readmission rates. The evaluation of IBR requires a team approach to planning, an organized research approach to implementation, and an eloquent approach to dissemination of information. Nursing, as part of interdisciplinary rounding and its evaluation, lead change and advance the health of patients (Institute of Medicine of the National Academies, 2010). IBR uses evidence-based nursing research to promote professional development at the bedside and create expert nurses who form engaged teams that can improve patient satisfaction and clinical outcomes (Ellerbe & Regen, 2012). It is this synergistic combination that promotes success of such programs.

Section 4: Findings, Discussion, and Implications

## Introduction

The purpose of this project was to evaluate the IBR program at SHZCH. Two areas of focus were selected for this quality improvement project. The first area of focus was the patient's perception of communication with nursing. HCAHPS scores were examined to determine if patient satisfaction with nursing communication improved with IBR. The second area of focus was the evaluation of 30-day readmission rates to determine whether there was a decrease in those patients who received IBR.

Goal 1: To determine if IBR improved patient satisfaction in nursing communication. It was hypothesized that patient satisfaction scores regarding nursing communication would increase.

Objective 1: Patient satisfaction regarding nursing communication was evaluated at 3 months prior to IBR implementation and 3 months after IBR implementation.

Goal 2: To determine if IBR reduced 30-day readmission rates in hospitalized patients. It was hypothesized that those patients who were hospitalized after the IBR process was initiated would be less likely to return within 30 days for readmission.

Objective 2: Thirty day readmission rates of hospitalized patients were evaluated at 3 months prior to the initiation of IBR and 3 months after the initiation of IBR.

The first goal of this project was to determine if IBR improved patient satisfaction in nursing communication. Pre-IBR, 120 patients were surveyed, with 42 returned surveys. According to study results, there was an 85% patient satisfaction rate with nursing communication. Post-IBR, 109 patients were surveyed, with 55 of those surveys

returned. The post-IBR patient satisfaction rate with nursing communication was 84.4%.According to the findings of this project, when compared to HCAHPS from 3 months before the initiation of IBR, patient satisfaction with nursing communication remained at the same threshold as the previous 3 months.

The second goal of this project was to evaluate whether IBR decreased hospital readmission rates. There were 109 patients admitted in July of 2013, with 11hospital-wide readmissions. Only one IBR participant was readmitted within 30 days of the original stay. This reflected a 1% readmission rate for those who participated in the IBR program, with a 10% total readmission hospital-wide rate at 3 months post-IBR implementation. The 30-day readmission rate 3 months prior to IBR implementation was 6%, with 120 patients and seven readmissions. Even though total hospital readmissions were higher 3 months after the initiation of IBR, only one participant of the IBR program was among them. This reflected a meaningful finding for the IBR program and successful achievement of the second goal of this project.

## Findings and Discussion

### Patient Satisfaction

Goal 1 of the IBR evaluation project was to determine if IBR improves patient satisfaction in nursing communication. It was hypothesized that patient satisfaction scores regarding nursing communication would increase. Patient satisfaction regarding nursing communication was evaluated at 3 months prior to IBR implementation and 3 months after IBR implementation. This evaluation took place with the use of HCAHPS scores.

Three months prior to the initiation of IBR at SHZCH, in January of 2013, there were a total of 120 adult patients admitted (SHZCH, 2013). Spectrum Health, through a company called Press Ganey, sent HCAHPS surveys to all 120 patients. Forty two of the patients returned their surveys. At that time, the HCAHPS rating for the patients' perception of their communication with nurses was at 85%. This was further broken down to include nurses listening carefully, 90%; nursing treatment with courtesy and respect, 85%; and nurses explaining things in a way understood by the patient, 80% (Spectrum Health, 2013).

Three months after the initiation of IBR, in July of 2013, there were 109 adult patients admitted to SHZCH (2013). All patients were sent surveys by Press Gainey. HCAHPS surveys returned were 55. The patients' perception of their communication with nurses was at 84.4%. This breakdown revealed the following: nurses listening carefully, 82.6%; nursing treatment with courtesy and respect, 87.1; and nurses explaining things in a way understood by the patient, 83.7% (Spectrum Health, 2013). The required threshold, or hospital desired goal, was 85% for all categories (Figure 1).

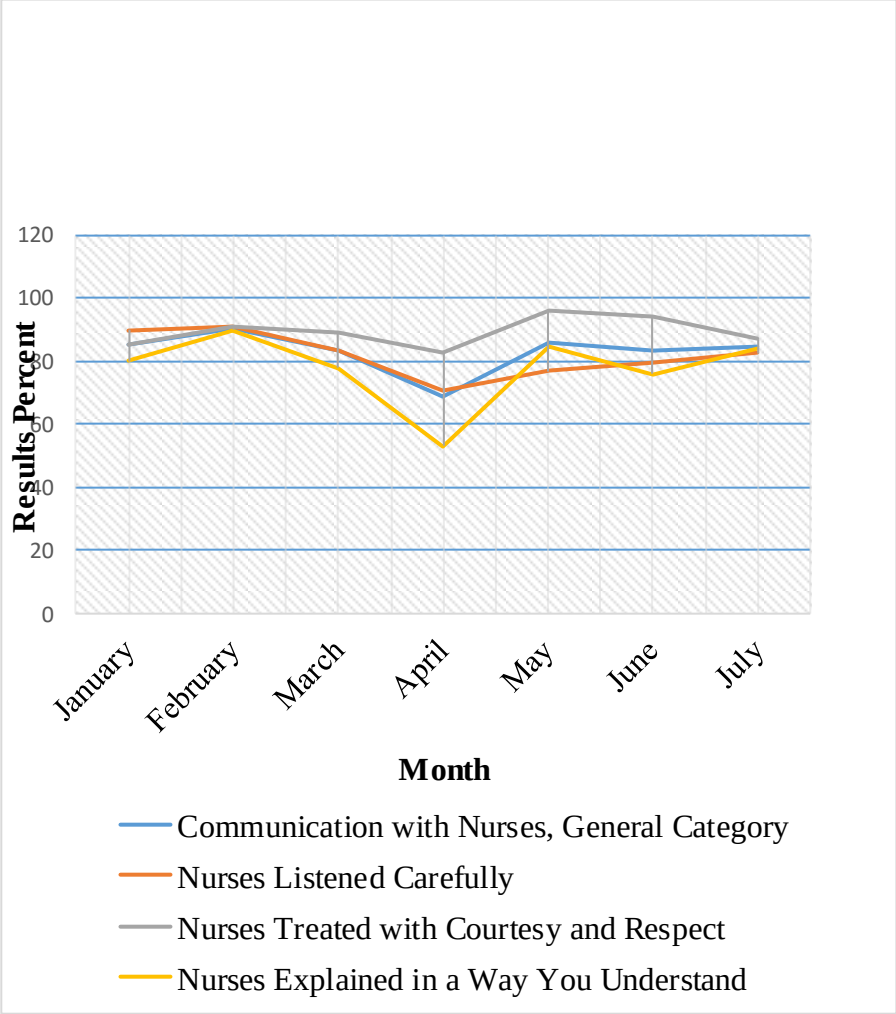


*Figure 1*. Patient satisfaction with nursing communication January -July 2013

Goal 1 of this project was to determine if IBR improves patient satisfaction with nursing communication. Implementation of the IBR program did not, as a whole, improve the patient's satisfaction with nursing communication as determined using HCAHPS scores. Patient satisfaction with nursing communication remained near the pre-IBR threshold: 85% 3 months prior to IBR implementation and 84.4% 3 months after. The patient's perception of satisfactory nursing communication was likely not dependent on actual interdisciplinary bedside rounding.

A possible etiology for the lack of improvement was that patient satisfaction with nursing communication at SHZCH was already at a high percent rating prior to IBR implementation. The addition of IBR in the setting of high patient satisfaction with nursing communication at baseline represented no significant change, positive or negative. This may be a reflection of the quality nursing care provided at this hospital.

Another possible etiology for the lack of improvement in patient satisfaction with nursing communication was that the current form of IBR does not promote a fostering of meaningful communication between nursing and the patient. IBR may have been too physician guided or not enough nursing input was solicited. Chung and Nguyen (2005) found that nurses was more reserved with their communication in the presence of a physician during bedside rounding. Perhaps the presence of a physician during IBR contributed to a stifling of verbal nurse interaction. That verbal interaction stifling may have resulted in the lack of improvement in the patients' overall satisfaction with nursing communication.

Another etiology for a lack of improvement in patient satisfaction with nursing communication may be the refocused patient satisfaction with other professionals. The interdisciplinary roles taken by caregivers during IBR could take the focus away from the nurse-patient relationship, focusing on other disciplines that were present and who interacted with the patient. This refocusing could have widened the patient's perspective in general. The widening caregiver perspective may have improved the patient's satisfaction with physician communication or the pharmacy (ie., instead of nursing). Broadening the spectrum of caregiver satisfaction could have decreased the focus on nursing.

The use of HCAHPS as a determining factor regarding the patients' satisfaction with nursing communication might be less reflective of the patients' true interpretation of improved satisfaction during the IBR process. Often a poor interaction in one area such as the poor quality food served, pain medication not arriving when the patient feels it is necessary, or an unsatisfactory interaction with one nurse can shadow the results of other areas in the HCAHPS scoring system (Spectrum, 2013). This phenomenon may have created unclear findings regarding patient satisfaction with nursing communication during the evaluation time of the IBR program.

The Iowa model of evidence-based practice shows the importance of using research within the context of the health care system, provider, patient, and infrastructure to guide practice decisions (Titler, 2001). The model was used as a guide in the administration of this evaluation regarding whether IBR improves patient satisfaction with nursing communication. The final step in the Iowa model was to evaluate the

outcomes for the purpose of establishing whether the model should be re-engaged. IBR did not improve patient satisfaction with nursing communication. The Iowa model could be re-engaged in future studies to evaluate why patient satisfaction did not improve.

Although IBR did not increase patient satisfaction with nursing communication generally, it did improve some of the components of that category. HCAHPS divided the communication with nurses' category into three separate survey questions: whether nurses listened carefully, nursing treatment was with courtesy and respect, and nurses explained things in a way understood by the patient. The average results of these three categories comprise the total reported in the communication with nurses' category.

The first subcategory of the HCAHPS communication with nurse's survey response, nurses listened carefully, went down to 82.6%, from 90% at 3 months prior to the initiation of IBR (Figure 1). This is a 7.4% drop in the patients' survey findings regarding nurses listening carefully from pre-IBR to post-IBR. Causes for the drop are unclear. The process of IBR could have been distracting for the nurse. It could have taken the nurse's focus off the patient and on to the IBR process instead. This may have given the patient the idea that the nurse was not listening carefully. Another potential cause could have been the increased workload of the nurse to participate in the IBR process. IBR could take up to an hour of a nurse's time out of his or her work day and may have created less time to interact with the patient with effective listening skills. This increased time demand may have made the nurse less available and attentive in his or her general duties. The actual cause of the drop in patient satisfaction regarding nurses listening

carefully is unknown, but further study would be beneficial to determine the cause of this score.

The second subcategory of the HCAHPS communication survey was the patients' satisfaction in regards to how they perceived that nursing treated them with courtesy and respect. This subcategory increased by 2.1% (Figure 1). Falise (2007) reported that courtesy and respect among participants in their IBR process increased. Gardner (2005) described similar findings in collaborative sessions. Kilgore and Langford (2009) described the promotion of mutual courtesy and respect in the setting of interdisciplinary health care teams as a necessity to reduce the risk of team failure. The IBR process promotes patient interaction. This interaction among the patient and professionals with the common goal of making the patient well makes the patient an active participant of the team. Having the opportunity to voice concerns, make suggestions, and be heard is what IBR promotes. These qualities, in turn, can facilitate the feelings of courtesy and respect (Falise, 2007).

The third subcategory of the HCAHPS communication, nurses explaining things in a way understood by the patient, increased by 3.7% (Figure 1). This is one of the key processes of IBR, not only for nursing but for other health care disciplines that had participated in IBR as well. Salehi et al. (2013) outlined the importance of communication for patient satisfaction. Clear explanations, in a way that the patient can understand, promote improved health outcomes and patient satisfaction with their care (Reader, Flin, Mearns, & Cuthbertson, 2007). IBR has an educational component to it. Each IBR discussion with the patient involves the opportunity for the patient to ask

clarifying questions and have explanations provided. This can improve health literacy and improve patient satisfaction regarding how the patient's nurse explained things in a way that the patient understood.

**Thirty Day Readmission Rates**

Goal 2 was to determine if IBR reduces 30-day readmission rates in hospitalized patients. It was hypothesized that those patients who were hospitalized after the IBR process was initiated would be less likely to return within 30 days for readmission. Thirty day readmission rates of hospitalized patients were evaluated at 3 months prior to the initiation of IBR and 3 months after the initiation of IBR.

Readmission rates are calculated by Spectrum Health. Specific data regarding the admissions were obtained from the DON and included FIN numbers and admission dates. Data regarding patients who had experienced IBR were obtained by records held by the unit clerks on the medical/surgical floor and a database. The readmission data were added to the database and a comparison was made as to who had experienced IBR and had returned within 30 days with the same diagnosis.

In January of 2013, pre-IBR, the 30-day readmission rate was 6%. This included a total census in January of 120 patients. Seven of the patients returned within 30 days with the same diagnosis of their original admission. In July of 2013, post-IBR, the hospital-wide readmission rate was 10%. Those post-IBR admits were admissions within 30 days of original stay, with the same diagnosis. The post-IBR monthly census of patients was 109, with 11 readmissions. There was only one post-IBR patient who had experienced

IBR and had returned within 30 days with the same diagnosis, reflecting 1% of the post-IBR hospital readmission rate (Figure 2).

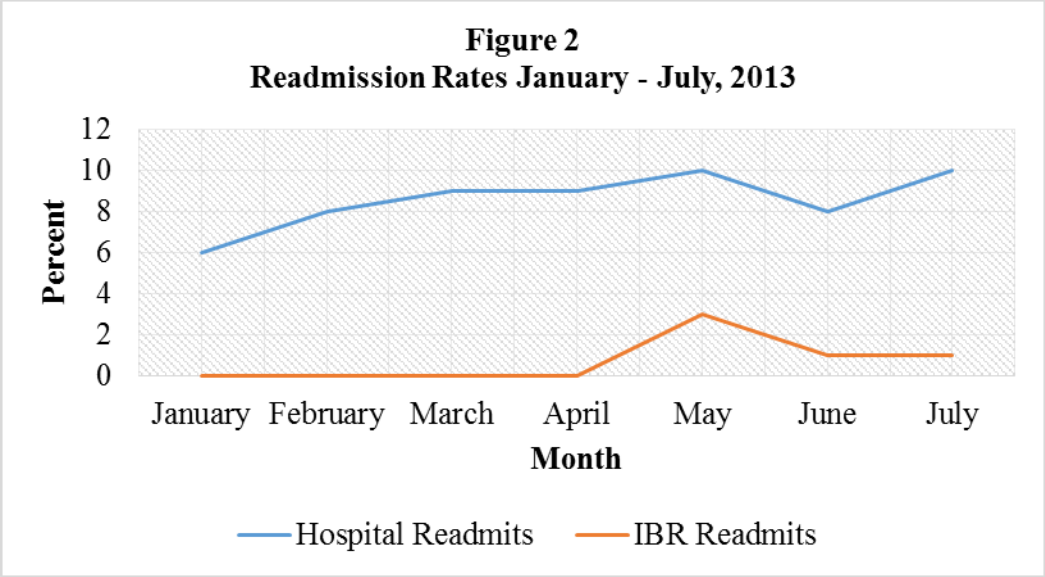


*Figure 2*. Readmission rates January- July, 2013

Only 1% of the readmissions in July were part of the IBR program, supporting the hypothesis that IBR decreases readmission rates. Because only one patient returned within 30 days attests, IBR program is valid. These data represent improved health outcomes for those who participated with IBR and represent a significant cost savings for the hospital.

The lower readmission rate for IBR patients signified an improvement in patient outcomes. Readmission rates and patient outcomes are a way of measuring the quality of care given (IOM, 2001). Improved patient outcomes are essential to the creation of a health care system that is attentive to the needs of those served (Downs, Standish, & Allred, 2012). These data is of importance when costs of hospital stays are considered.

Hospitals do not get paid for readmission stays for the same diagnosis within 30 days (U.S. Department of Health and Human Services, 2009). The finding that IBR decreases patient readmission rates was a significant finding that benefits the patient and the hospital. Multiple causes for these results regarding IBR are present.

First, IBR may have improved health literacy. This was evidenced through the HCAHPS scores that identified an improvement in how nurses explained things in a way that the patient could understand. Improved health outcomes are directly related to patient understanding of how to care for their health conditions (Reader, Flin, Mearns, & Cuthbertson, 2007). Improved health literacy may have contributed to a decrease in the number of patients returning within 30 days with the same medical condition.

Second, IBR promoted patient interaction with the IBR group. When a patient is an active member of the care team, the patient is involved with mutual goal setting to promote the progress towards a healthy discharge. This allows for a certain level of patient accountability for their own health actions (Lusk & Kerry, 2013). The congestive heart disease patient knows that they can only drink two liters of fluids per day and learns how much fluid a coffee cup, glass, or pitcher holds. The next day, he or she report their fluid intake to the IBR team. If it is over two liters, the patient must discuss the reasons why and the team can trouble shoot with the patient to plan how to avoid drinking too much in the future. Personal accountability through interaction with the IBR group can promote improved health outcomes and decrease readmission rates.

Third, IBR promoted teamwork among areas of care. The promotion of teamwork towards a patient's mutually identified goal focuses the team's resources toward

obtaining the identified outcome of that goal and improving patient outcomes (Lee, Rutherford, & Peck, 2008). Cooperative teamwork leading to the improvement of patient outcomes is a sign of success for an interprofessional collaborative practice, including IBR (Interprofessional Education Collaborative Expert Panel, 2011). The improvement in patient outcomes can reduce thirty day readmission rates.

## Implications

This project was an evaluation of an interdisciplinary bedside rounding program. Two areas of focus were evaluated; whether IBR improved patient satisfaction with nursing communication and whether IBR decreased 30 day readmission rates. IBR did not improve patient satisfaction with nursing communication, but did significantly decrease 30 day readmission rates in those that participated in the program.

## Impact on Practice

The future of the healthcare delivery system includes attentiveness to cost, quality, and access (U.S. Department of Health and Human Services, 2009). Seventeen percent of the U.S. GDP goes to healthcare costs. With the Affordable Care Act now in action, there is an influx of Medicaid patients into the system and an anticipated $155 billion in funding cuts coming, with a new payment structure soon to occur. Hospitals have to cut costs in order to survive in this environment (Bessler, 2012). With the increasing demands of productivity and the changing reimbursement, traditional models of teamwork are no longer functioning efficiently in the changing healthcare environment (Cole et al., 2003). New Medicaid and Medicare reimbursements to hospitals are now becoming based on a value-based incentive payment program.  Quality is an important

component of the Affordable Care Act. Reimbursement is tied to quality core measure performance, including 30 day readmission rates and patient satisfaction (U.S. Department of Health and Human Services, 2013).

Communication failure is a frequent cause of preventable harm to patients (Gurses & Xiao, 2006). Communication among the IBR team members and the patient had been associated with improved understanding of patient care goals in other studies (Reader, Flin, Mearns, & Cuthbertson, 2007). Further study into the lack of patient satisfaction with nursing communication and determining if other communications during IBR were successful, such as patient satisfaction with physician communication, would be beneficial in the promotion of IBR as a tool of quality patient communication.

Hospital readmission rates are a quality core measure that is a monitored component of reimbursement (CMS, 2012). On average, 19.6% of all hospitalized patients are readmitted within 30 days. Between ten and fifty percent of these readmissions are considered to be potentially avoidable and not reimbursed through Medicare (Jencks, 2009). Considering a cost-benefit analysis for the Michigan area, the average patient stay is 4.8 days (CDC, 2010) and the average cost for inpatient hospital care in Michigan is $2,020 per day (Oh, 2012). This would make the average cost per patient stay approximately $11, 716. The estimated cost of set up of the IBR program at SHZCH was about $4,625 in supplies and staff time. Monthly bedside rounding costs including, on average, eight staff members at two hours per day for one month equals approximately $12,000. Preventing even two hospital readmissions a month would offset the program costs and save the hospital money. Considering those who did not participate

in IBR and the one percent IBR readmission rate, the hospital could conceivably save $82, 012 per month at Spectrum Health Zeeland Community Hospital alone if IBR was done on all patients.

A lack of primary care providers can play a major role in hospital readmission rates. On average, of those readmitted, 50% had no regular primary care provider that could have intervened in promoting after-hospital care and medical follow-up (Jencks, 2009). With declining hospital reimbursements and an increasing lack of physician follow-up after discharge, the quality of care provided to the patient while in the hospital is of vital importance. Areas of focus for hospitals that can now have an effect on their financial bottom line are preventable readmissions and value-based care (AHA, 2011). The IBR program can save the hospital money by decreasing readmission rates.

The decrease in hospital readmission rates caused by the IBR program is not only of financial benefit. The representation of the decrease in the readmission rates by those who participated in the IBR program, most of all, shows that there was a level of care that had been provided that elevated the quality of the care given. This, in turn, had improved patient outcomes significantly, as evidenced by the decrease in readmission rates by IBR participants. The implications for this improvement cannot be emphasized enough. The IOM called for professionals to work collaboratively to improve patient care quality and safety (IOM, 2010). The Affordable Care Act had identified the need for the improvement and accountability for the quality of care provided to patients (U.S. Department of Health and Human Services, 2013). This has evolved into a path to new ways of applied patient care experience. IBR has shown to promote a new path.

## Impact for Future Research

The Patient Centered Outcomes Research Act of 2009 promoted the consideration of health delivery as a science. It supported nursing as one of the keys to lead a transformation towards the focus of patient outcome processes. No other discipline crosses the patient population as nursing does (White & Dudley-Brown, 2012). The Patient Centered Outcomes Research Act was not passed through congress, but components were added to the Affordable Care Act with the Patient Centered Outcomes Research Institute (PCORI) being created and funded by the government (PCORI, 2014). Satisfactory communications between the patient and nursing are essential to promoting patient centered outcomes with patients being kept informed, in a language that they can understand, about their service and any changes to that service. This is a dimension of quality and a successful program (Kettner, Moroney, & Martin, 2013). The IBR program has the potential to uphold the ability of nursing to have effective communications with patients. This, in turn, can promote nursing as a leader in patient centered outcomes. Future research into the effects of nursing communication with patients' during IBR and beyond can solidify this role as leader.

The reduction of thirty day readmission rates has been show to occur with the use of the the IRB program. These findings suggest that the dissemination of the IRB program into mainstream hospital health care may decrease costs across the realm of health care through the decrease in readmission rates (Falise, 2007). Further study into exactly what components of the IBR program enhance this reduction can hold promise regarding future areas to focus the rounding process on.

## Impact on Social Change

The implementation and evaluation of evidence based practices, such as the IBR, requires strategies that address the complexity and systems of care, individual participant needs, leadership cooperation, and the changing of the health care culture (Titler, 2010). Program evaluation has the ability to validate programs and promote beneficial changes in program initiation, policies, and practices (Yarbrough, et al., 2011). The Iowa model of evidence based practice promotes the use of evaluation and uses research within the context of the healthcare system, provider, patient and infrastructure to assist in practice or program decisions (Dontje, 2007). The evaluation of the IBR program, using the Iowa model within the realm of nursing, demonstrates nursing's role in project development and evaluation. This is a step toward greater leadership recognition for nursing. The IOM, in their call for an improved future of healthcare, supports nursing as the best workforce to help redesign healthcare (IOM; 2001, 2010). The American Association of Colleges of Nursing (AACN) that leadership is critical in the improvement of patient and healthcare outcomes (AACN, 2006). Evaluating projects, such as the IBR program, is a step towards this leadership and improvement of the healthcare system.

The results of this project, patient satisfaction with nursing communication and an improvement of 30 day readmission rates, both work towards supporting the use of IBR in a clinical setting. IBR itself is a type of care that is patient focused and interactive, supporting the social change that the Affordable Care Act is promoting. The IOM has proposed a new paradigm in which a multidisciplinary collaborative approach is needed to create a new form of patient centered care; one that decreases cost, improves

efficiency, and supports patient satisfaction (IOM, 2010). IBR fits well into this new paradigm.

## Strengths and Limitations of Project

### Strengths

This project used data from sources from professional entities, including Press Gainey scores and state reporting data compiled by Spectrum Health. The reliability of this data is scientifically accurate and adds strength to the findings of this study. The Iowa model supports this project well through the guidance of evidence-based practice ideals. This directs the researcher to analyze focusing on structure, process, and outcomes (Titler, 2010).

### Limitations

The study sample for both the HCAHPS scores and the readmission rate was small. The evaluation time could be expanded so as to include more population and greater expanse of data. It is unclear whether the patient satisfaction concerning communication with nurses was decreased slightly because of other extraneous events such as a single nursing issue skewing the patient's satisfaction with nursing communication as reported on the HCAHPS or the IBR program itself. Although the 30 day readmission rates were significantly decreased for the IBR program participants, this study does not represent a clear indication that nursing communication was the cause of this decrease. Other components of the IBR program could play an important role in this finding as well.

## Recommendations for Future Projects

Future projects that study IBR could include a more in depth evaluation of why the patients' satisfaction with nursing communication was not improved. Patient communication with nurses is a fundamental area of concern that is vitally important to the patient, nurse-patient relationship, and to patient outcomes (Thompson, 2010). Identifying a way to improve IBR so as to increase patient satisfaction with nursing communication is significant to a successful program.

The role of nursing has expanded into the nurse practitioner realm, with nurse practitioners advancing into health care provider roles in the hospital setting. Identifying those advanced practice nurses and evaluating the patients' satisfaction with nurse practitioner providers would be significant in the promotion of nursing as leaders in health care.

A program that decreases 30 day readmission rates is of great financial value in this era of cost containment (Silow-Carroll, Edwards, and Lashbrook, 2011). Determining if the decrease in 30 day readmission rates was sustained by the IBR program would further promote IBR expansion. To do this, one would need to examine readmission data up to a year beyond the initiation of the IBR program.

## Analysis of Self

As a Scholar, this project process has expanded my knowledge of purpose. The process of searching, analyzing, and forming conclusions based on evidence has given me scientific underpinnings that will follow me as I continue in this discipline and helps to solidify my performance in the profession as a doctorate prepared advanced practice

nurse. The AACN (2006) denote that a more scientific basis for practice is essential for the doctorate prepared nurse. The social change that has occurred for me because of this education include being considered more of an expert in the field, fulfilling the role of mentor to those nurses advancing their own education, and being considered for leadership roles.

As a practitioner, the DNP program and specifically my project, has provided information to my hospital that has solidified their investment in continuing the program. Although not successful at improving nursing HCAHPS scores, the reduction in hospital readmission rates was significant enough for the hospital to take notice. They want to expand the program to their other satellite hospitals. This type of research supports the nursing discipline, enhances the status of the profession, and helps to spur social change regarding the practice of nursing. Essential VII of the AACN doctorate essentials distinguishes the implementation of interventions that promote health and risk reduction as clinical prevention that is essential to achieving the national goal of population health improvement (AACN, 2006). This will promote that social change one hospital at a time.

As a program evaluation developer and manager, the skills gleaned from the evaluation of patient satisfaction with nursing communication and thirty day readmission rates as they pertain to those who participated in IBR helped my ability to critically look at other programs. The nursing discipline needs more evaluative input to their work, promoting evidence-based care and clinical scholarship that recognizes new knowledge as a positive outcome of the evaluation process (Titler et al., 2001). Professionally, the use of structured models to promote quality care, such as the Iowa model for this project

helps to promote this. The application of such models helps to promote a better practice standard for myself, my colleagues, and supports social change that can improve and transform health care. Essential IV of the AACN Essentials of Doctorate Education (2006) encourage this by supporting the use of programs that evaluate the outcomes of care.

This project has presented opportunities for my own future development in a multitude of ways. Pursuing the needed information for this project has introduced me to the nursing research committee. This committee is supportive and promising in regards to further research support and evidence-based care promotion. The department of quality management was supportive of my endeavors and wish further communications regarding my research findings. Since I am an expert at the IBR program at this point, the initiation of it at other affiliated hospitals may provide me with a career path that I had not even considered.

## Summary

This quality improvement project evaluated whether IBR increased patient satisfaction with nursing communication and if IBR improved hospital readmission rates. A retrospective design was used to collect data 3 months prior to and 3 months following IBR on one medical-surgical hospital unit. A convenience sample of patients participating was used. The findings of this project, compared HCAHPS scores from 3 months before the initiation of IBR, reveal that IBR did not improve patient satisfaction with nursing communication overall, but did improve certain components of the HCAHPS score. Improvements were seen in the patients' perception of how the nurse

explained things in a way that they could understand, and in the patients' perception that the nurse treated them with courtesy and respect.

Thirty day readmission rates were evaluated 3 months prior to IBR implementation and 3 months after IBR initiation. The findings identified a distinct improvement in 30 day readmission rates in those that participated in IBR. This represented a significant improvement in patient outcomes and cost savings for the hospital.

Impacting future research, the promotion of IBR can uphold the pursuit of improved quality in patient care with this project being a stepping stone to future work. The financial savings recognized at the corporate level can promote IBR idea support. The impact on social change includes recognition of nurses as leaders through project ownership and evaluation, as well as promoting IBR as a significant step towards a new paradigm of patient care.

Section 5: Scholarly Product

## Publication

Submitted for publication.

## References

American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice.* Washington, DC: Author.

American Hospital Association. (2011). *Caring for Vulnerable Population.* Chicago: American Hospital Association. Retrieved from www.aha.org/research/cor/content/caring_vulnerable_populations_report.pdf

American Hospital Association. (2013). *Fast Facts on US Hospitals*. Retrieved from www.aha.org/research/rc/stat-studies/fast-facts.shtml

American Nurses Association. (2010). Nursing: Scope and standards of practice. Silver Spring, MD: Author. pp 1-68.

Anderson, D., & Todd, S. (2011). Hospital design: Staff preference for multidisicplinary rounding practices in the critical care setting. *Design & Health 7th World Congress & Exhibition*. Boston: International Academy for Design & Health. pp 1-33.

Barker, S., Dressman, K., & Warden, D. (2013). *Increasing patient satisfaction by moving nursing shift report to the bedside.* Retrieved from http://www.cincinna.chirlents.org/service/i/anderson-center/evidence-based-care/bests

Baur, C. (2010). Evidence based practice: Demystifiying the Iowa model. *Metropolitan Detroit Chapter Capsule, 25*(2), 1-3.

Bessler, R. (2012). The economics of hospital medicine. *Hospital Medicine 2012*. San diego: Society of Hospital Medicine. pp 1-22.

Bharwani, A., Harris, G., & Southwick, F. (2012). Perspective: A business school view of medical interprofessional rounds: tramsforming rounding groups to rounding teams. *Academic Medicine*, 1768-71. doi:10.1097/ACM.0b013e318271f8da

Bliss, M., & Emshoff, J. (2002). *Workbook for designing a process evaluation.* Atlanta, GA: Georgia State University, Department of Psychology. pp 2-14.

Boulding, W., Glickman, S., Manary, M., Schulman, K., & Staelin, R. (2011). *Relationship between patient satisfaction with inpatient care and hospital readmission within 30 days.* Retrieved from www.ajmc.com/publications/issue/2011/2011-1-vol17-nl/ajmc_11jan_boulding_41to48/1

Centers for Disease Control and Prevention. (2005). *Introduction to program evaluation for public health programs: A self-study guide.* Atlanta, GA: Centers for Disease Control and Prevention.

Centers for Medicare & Medicaid Services (CMS). (2013). *Readmission reduction program*. Retrieved from www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html

Centers for Medicare & Medicaid Services (CMS). (2008). *Center for medicaid and state operations.* Baltimore, MD: Department of Health & Human Services.

Centers for Medicare & Medicaid Services. (2012). *CAHPS Hospital Survey*. Retrieved from Hospital Care Quality Information from the Consumer Perspective: www.hcahpsonline.org/home.aspx

Chapman, K. (2009). Improving communication among nurses, patients, and physicians.

*American Journal of Nursing, 109*(11), 21-25.

Chung, H., & Nguyen, P. (2005). Changing unit culture: An interdisciplinary committment to improve pain outcomes. *Journal of Healthcare Quality*, *27*(2), 9-12. doi:16190306

Cox, E. S. (2011). Medical student outcomes after family-centered bedside rounds. *Academic Pediatrics, 11*(5), 403-408.

Curtis, R., Cook, D., Wall, R., Angus, D., Bion, J., Kacmarek, R., Puntillo, K. (2006). intensive care unit quality improvement: A "how to" guide for the interdisciplinary team. *Critical Care Medicine*, *34*(1), 211-218. Retrieved from http://joiurnals.lww.com/ccmjournal/abstract/2006/010010/Intensive_care_unit_quality_improvement_ A.29aspk

Dontje, K. (2007). Evidence-based practice: Understanding the process. *Topic in Advanced Practice Nursing eJournal, 7*(4). Retrieved from http://www.medscape.com/viewarticle/567786_4

Downs, M., Standish, C., & Allred, M. (2012). Safe, secure, and satisfied. *Academy of Medical-Surgical Nurses Official Newsletter*, *21*(6), 1-8.

Ellerbe, S., & Regen, D. (2012). Responding to health care reform by addressing the Institute of Medicine report on the future of nursing. *Nursing Administration Quarterly, 36*(3), 210-216. doi:10.1097/NAQ.0b013e318258bfa7

Falise, J. (2007). True collaboration: Interdisciplinary rounds in nonteaching hospitals-it can be done. *AACN Advanced Critical Care, 18*(4), 346-351.

Friis, R., & Sellers, T. (2009). *Epidemiology for public health practice (4th ed.).*

Sudbury, MA: Jones & Bartlett Publishers. pp 67-72.

Gardner, D. (2005, January 31). Ten lessons in collaboration. *The Online Journal of Issues in Nursing, 10*(1), 1-13. doi:10.3912/OJIN.Vol10no01Man01

Goode, C. F. (2011). The Colorado patient-centered interprofessional evidence-based practice model: A framework for transformation. *Worldviews on Evidence-Based Nursing*, 96-105.

Gurses, A. &. (2006). A systematic review of the literature on multidisciplinary rounds to design information technology. *Journal of the American Medical Informatics Association, 13*(3), 267-276.

Halm, M. G. (2003). Interdisciplinary rounds: Impact on patient, families, and staff. *Clinical Nurse Specialist, 17*(3), 133-142.

Health Research & Educational Trust. (2012). *Health care leader action guide to effectively using HCAHPS.* Chicago, IL: Health Research & Educational Trust. Retrieved from www.hpoe.org/resources-and-tools/resources/HCAHPS%20effective%20use.pdf

Hodges, B., & Videto, D. (2011). *Assessment and Planning in Health Programs.* Sudbury, MA: Jones & Bartlett Learning.

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS). (2012). *HCAHPS Tables.* Washington, D.C.: HCAHPS. Retrieved from www.hcahpsonline.org

Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century.* Washington DC: National Academy of Sciences.

Institute of Medicine. (2010). *Report brief: The future of nursing: leading change, advancing health: Report brief.* Retrieved from www.iom.edu/-/media/Files?Report520Files/2010/The-Future-of-Nursing

Institute of Medicine of the National Academies (IOM). (2010). *The future of nursing: leading change, advancing health.* Washington DC: Institute of Medicine. Retrieved from www.iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health

Interprofessional Education Collaborative. (2011). *Core competencies for interprofessional collaborative practice.* Washington, D.C.: Interprofessional Education Collaborative (IPEC). Retrieved from www.aacn.nche.edu/leading-initiatives/IPECProceedings.pdf

Interprofessional Education Collaborative Expert Panel. (2011). *Core competencies for interprofessional collaborative practice: Report of an expert panel.* Washington, DC: Interprofessional Education Collaborative. pp 1-30.

Joint Commission on Accreditation of Healthcare Organizations. (2000). *Comprehensive accreditation manual for hospitals: The official handbook.* Chicago: Joint Commission on Accreditiation of Healthcare Organizations. pp 2-12.

Kelleher, A., Moorer, A., & Makic, M. (2012). Peer-to-peer nursing rounds and hospital-acquired pressure ulcer prevalence in a surgical intensive care unit. *Journal of Wound, Ostomy, and Incontinence Nurses Society, 39*(2), 152-157.

Kelly, D. (2011). *Applying quality management in healthcare.* Chicago, IL: Health Administration Press. pp 223-248.

Kettner, P., Moroney, R., & Martin, L. (2013). *Designing and Managing Programs* (4 ed.). Los Angeles, CA: Sage. pp 1-22.

Kilgore, R., & Langford, R. (2009). Reducing the failure risk of interdisciplinary healthcare teams. *Critical Care Nursing, 32*(2), 81-88.

Kowal, C. (2010). Implementing the critical care pain observation tool using the Iowa model. *Journal of the New York State Nurses Association*. Retrieved from www.nysna.org/images/pdfs/communications/journal/spgsmr10.pdf

Krom, Z., Batten, J., & Bautista, C. (2010). A unique collaborative nursing evidence-based practice initiatve using the Iowa model: A clinical nurse specialist, a health science librarian, and a staff nurse's success story. *Clinical Nurse Specialist, 24*(2), 54-9. doi:10.1097/NUR.0b013e3181cf5537

Kuo, D., Sisterhen, L., Biazo, J., Sigrest, T., Aitken, M., & Smith, C. (2013). Family experiences and pediatric health services use associated with family-centered rounds. *Pediatrics, 130*(2), 299-305. doi:10.1542/peds.2011-2623

Lee, B., Rutherford, P., & Peck, C. (2008). *Transforming care at the bedside how-to guide: Optimizing communication and teamwork.* Cambridge, MA: Institute for Healthcare Improvement. Retrieved from www.IHI.org

LeFrancois, D., & Leung, S. (2013). Bedside rounding strategies used by bedside teachers. *Journal of Gneral Internal Medicine, 28*(9), 1130. doi:10.1007/s11606-013-2461-x

Linnell, D. (2013, May 24). *Demystifying evaluation: types of evaluation-outcome and process.* Retrieved from

www.tsne.org/site/c.ghLUK3PCLoF/b.8023393/k.47B3/Articles_Demystifying_Evaluation_Process_Evaluation_vs_Outcome_Evaluation_for_Nonprofits.htm

Little, P., Williamson, I., Warner, G., Moore, M., Gould, C., Ferrier, K., & Payne, S. (2001). Preferences of patients for patient centered approach to consultation in primary care: Observational study. *British Medical Journal, 322,* 1-7. Retrieved from www.ncbe.nlm.nih.gov/pmc/articles/PMC26564

Lusk, J., & Kerry, F. (2013). A concept analysis fo patient-centered care. *Nursing Forum, 48*(2), 89-98. doi:http://dx.doi.org.ezp.waldenulibrary.org/10.1111/nuf.12019

MacDavitt, K., Cieplinski, J., & Walker, V. (2011). Implementing small tests of change to improve patient satisfaction. *Journal of Nursing Administration, 41*(1), 5-9. doi:10.1097/NNA.0b013e318200285b

Manojlovich, M. (2007). Healthy work environments, nurse-physician communication, and patient outcomes. *American Journal of Critical Care, 16*(6), 536-542.

MedicineNet, Inc. (2012). *Definition of Rounds*. Retrieved from www.medterms.com/script/main/art.asp?articlekey=40372

Mitchell, P., Wynia, M., Golden, R., McNellis, B., Okun, S., Webb, C., Von Kohorn, I. (2012). *Core principles & values of effective team-based health care.* Washington D.C.: Institute of Medicine. Retrieved from www.iom.edu/tbc

Moore, D. (2014). *Institutional Review Board*. Retrieved from www.irb.vt.edu/pages/confidentiality.htm

Newhouse, R., & Spring, B. (2010). Interdisciplinary evidence-based practice: Moving from silos to synergy. *Nursing Outlook 2010, 58*, 309-317.

doi:10.1016/j.outlook.2010.09.001

Northern Territory Government. (2013). *Multidisciplinary Teams*. Retrieved from Northern Territory Government: Department of Health: www.health.nt.gov.au/Cancer_Services/CanNET_NT/Multidisciplinary_Teams/index.aspx

O'Leary, K. (2012). Assessment of teamwork during structured interdisciplinary rounds on medical units. *Journal of Hospital Medicine., 7*(9), 679-683.

Otani, K. (2009). Patient satisfaction: Focusing on "excellent". *Journal of Healthcare Management, 54*(2), 93-103. Retrieved from www.ache.org/pubs/jhm/54-2/Patient%20Satisfaction%20article.pdf

Patient Centered Outcomes Research Institute. (2014,). *PCORI: About us*. Retrieved June 15, 2015, from http://www.pcori.org/

Phipps, L., Spear, D., Jones, L., Foerster, C., Killian, M., Hughes, J., Thomas, N. (2007). Assessment of parental presence during bedside pediatric intensive care unit rounds: Effect on duration, teaching, and privacy. *Pediatric Critical Care Medicine, 8*(3), 220-224.

Polit, D. (2010). *Statistics and data analysis for nursing research.* Upper Saddle River, NJ.: Pearson Education, Inc. pp 78-99.

QualityNet. (2013). *Readmission measures overview*. Retrieved from www.qualitynet.org/dcs/ContentServer?cid=1219069855273&pagename=QnetPublic%2FQnetTier3&c=Page

Reader, T., Flin, R., Mearns, K., & Cuthbertson, B. (2007). Interdisciplinary

communication in the intensive care unit. *British Journal of Anaesthesia, 98*(3), 347-52. doi:10.1093/bja/ael372

Robinson, J., Callister, L., Berry, J., & Dearing, K. (2008). Patient-centered care and adherence: Definitions and applications to improve outcomes. *Journal of the American Academy of Nurse Practitioners, 20*, 600-607. doi:10.1111/j.1745-7599.2008.00360x

Salehi, A., Strawderman, L., & Ruff, L. (2013, December 20). *The importance of communication for patient satisfaction.* Retrieved from http://www.iienet2.org/SHS/Details.aspx?id=18430

Salipante, D. (2002). Developing a multidisciplinary weaning unit through collaboration. *Critical Care Nurse, 2002*(22), 30-38.

Sheldon, L., & Ellington, L. (2008). Application of a model of social information processing to nursing theory: How nurses respond to patients. *Journal of Advanced Nursing, 64*(4), 388-398. doi:10.1111/j.1365-2648.2008.04795.x

Silow-Carroll, S., Edwards, J., & Lashbrook, A. (2011). *Reducing hospital readmissions: Lessons from top-performing hospitals.* Washington, DC: The Commonwealth Fund. Retrieved from www.commonwealthfund.org/Publications/Case-Studies/2011/Apr/Reducing-Hospital-Readmissions.aspx

Sisterhen, L., Blaszak, R., Woods, M., & Smith, C. (2007). Defining family-centered rounds. *Teaching and Learning in Medicine, 19*(3), 319-322. Retrieved October 9, 2013, from www.ncbi.nlm.nih.gov/pubmed/17594229

Society of Hospital Medicine. (200). *Definition of a hospitalist and hospital medicine*.

Retrieved from www.hospitalmedicine.org/AM/Template.cfm?Section=Hospitalist_Definition

Spectrum Health. (2013). *Center for patient experience*. Retrieved from: https://insite.spectrum-health.org/departments/Center-for-Exceptional-Experiences/Pages/default.aspx

Terry, A. (2012). *Clinical research for the doctor of nursing practice.* Sudbury, MA: Jones & Bartlett Learning. pp 62-143.

Thompson, S. (2010). The best of both worlds: Combining heart failure and palliative care in interdisciplinary rounds. *Heart & Lung, 39*(4), 363. Retrieved from www.heartand lung.org

Titler, M. (2010). Translation science and context. *Research and Theory for Nursing Practice: an International Journal., 24*(1), 35-55.

Titler, M., Steelman, V., Rakel, B., Budreau, G., Everett, L., Buckwalter, K., Goode, C. (2001). The Iowa model of evidence-based practice to promote quality care. *Critica Care Nursing Clinics of North America, 13*(4), 4987-509.

Townsend-Gervis, M., Cornell, P., & Vardaman, J. (2014). Interdisciplinary rounds and structured communication reduce re-admissions and improve some patient outcomes. *Western Journal of Nursing Research*. doi:10.1177/0193945914527521

U. S. Department of Health and Human Services. (2013). *Affordable Care Act.* Retrieved from www.hhs.gov/opa/affordable-care-act

U.S. Department of Health and Human Services. (2009). *Healthy People 2020.*

Washington D.C.: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from www.healthypeople.gov

U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. (2012). *Overview of key readmission measures and methods.* Retrieved from www.hcup-us.ahrq.gov/reports/methods/2012_04.pdf

University of Cincinnati. (2013). *Residency Training: Patient Centered Rounds*. Retrieved from http://intermed.uc.edu/education/residence/curriculum/patientcenteredrounds.aspx

White, K., & Dudley-Brown, S. (2012). *Translation of Evidence Into Nursing and Health Care Practice.* New York, N Y: Springer Publishing Company. pp 56-76.

Wild, D.(2004). Effects of interdisciplinary rounds on length of stay in a telemetry unit. *Journal of Public Health Management & Practice, 10*(1), 63-69.

Wood, D. (2013). CMS: Hospital readmissions declined in late 2012, ACA credited. Retrieved December 20, 2013, from http://amnhealthcare.com/latest-healthcare-news/cms-hospital-readmissions-declined-late-2012-ACA-credited.htm

Yarbrough, D., Shulha, L., Hopson, R., & Caruthers, F. (2011). *The program evaluation standards: A guide for evaluators and evaluation users* (Vol. 3). Los Angeles: Sage. pp 14-22.

Yeager, S. (2005). Interdisciplinary collaboration: The heart and soul of health care. *Critica Care Nursing Clinics of North America, 17,* 143-148. doi:10.1016/j.ccell.2005.01.003