


2017

Performance Improvement Data and Staff Responsibility

Tabitha Anne Bentley
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Health and Medical Administration Commons](#), and the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Tabitha Bentley

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. Oscar Lee, Committee Chairperson, Health Services Faculty

Dr. Tracy Wright, Committee Member, Health Services Faculty

Dr. Janice Long, University Reviewer, Health Services Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University

2017

Abstract

Performance Improvement Data and Staff Responsibility

by

Tabitha Bentley

MS, Walden University, 2013

BS, Medical College of Georgia, 2004

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

March 2017

Abstract

Improving the role the nurse plays in health care delivery should be embodied in the performance improvement initiatives to successfully improve the quality of care that is delivered. The purpose of this evidence-based practice project was to collect performance improvement data and present it to staff who, in turn, used the information to improve practice and influence patient safety outcomes. The practice-focused question addressed what would occur if a tool that allowed frequent data trending was used to measure effectiveness of care and thereby influence key outcome measures. Duffy's quality caring model provided a framework for the study to support the need for the development of a dashboard for staff and to ensure that staff were informed as they developed interventions to improve patient outcomes. Publicly available data published by the Centers for Medicare/ Medicaid (CMS) for the Quality Star Report were explored to inform the project. Workgroups, comprised of volunteers from leadership and staff providing care at the bedside, were formed to implement practice changes based on the dashboard reports. By bringing the data to the attention of nurses within the organization, improvements were made in the overall score for safety of care from below national average (25th percentile of the reported 3,647 hospitals across the nation) to the same as national average (47th percentile) as reported by CMS. Through staff involvement, social change occurred as strategies were hardwired to improve categories of the Quality Star Report and ultimately patient care. The project showed that quality improvement tools can assist in empowering staff to understand the data needed to implement process improvement strategies.

Performance Improvement Data and Staff Responsibility

by

Tabitha Bentley

MS, Walden University, 2013

BS, Medical College of Georgia, 2004

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

March 2017

Dedication

This project is dedicated to my family who has always supported my ambitions. My parents, Greg and Mickey Bentley, taught me never to give up on my dreams. My son, Austin Aldridge, has been by my side since I started college. My husband, Kyle Garbart, has lent his unconditional support and knows how to challenge me like no one else.

Table of Contents

List of Tables	iii
List of Figures	iv
Section 1: Nature of the Project	1
Introduction.....	1
Problem Statement	1
Purpose.....	2
Nature of the Study	4
Significance.....	5
Summary	7
Section 2: Background and Context.....	8
Introduction.....	9
Nursing Theory	9
Relevance to Nursing Practice	10
Local Background and Context	11
Role of the DNP Student.....	14
Role of the Project Team	15
Summary	16
Section 3: Collection and Analysis of Evidence.....	16
Introduction.....	17
Practice-Focused Question.....	17
Sources of Evidence.....	18

Archival and Operational Data	19
Analysis and Synthesis	20
Summary	28
Section 4: Findings and Recommendations	29
Introduction.....	31
Findings and Implications.....	31
Recommendations.....	33
Contributions of the Doctoral Project Team.....	34
Strengths and Limitations of the Project.....	35
Section 5: Dissemination Plan	36
Introduction.....	38
Analysis of Self.....	38
Summary	37

List of Tables

Table 1. Core Measures and their Components	21
Table 2. Subcomponents of Inpatient Core Measures	22
Table 3. Subcomponents of Behavioral Health Core Measures	22
Table 4. Subcomponents of Emergency Department Core Measures	23
Table 5. HAC Reduction Program.....	24
Table 6. Infection Prevention.....	25
Table 7. High Reliability and Patient Safety	26
Table 8. Falls.....	27
Table 9. Performance Improvement	28
Table 10. Patient Perception	29

List of Figures

Figure 1. Study site comparative data.....30

Section 1: Nature of the Project

Introduction

Health care is under scrutiny as cases involving wrong site surgery, erroneous medication administration, and other patient safety concerns have been reported. Quality data are now publically reported to consumers to help them select and evaluate the care that they receive. As health care organizations strive to produce better outcomes, it becomes imperative to gain support from staff for performance improvement efforts. Without staff engagement and buy-in, best practice initiatives cannot be implemented, and quality of care cannot be improved (Barnard, 2011).

Problem Statement

At the local clinical practice study site, administration struggled to engage staff to improve patient outcomes through performance improvement initiatives. Staff awareness is often the topic of conversation at many leadership meetings throughout the study site organization. According to leadership rounding, staff is often not aware of the overall quality measures that the hospital is measured on. Staff must be made cognizant of the types of performance improvement data that the hospital collects and reports. Once staff understands the data collection points and how to interpret them, staff can be engaged in the process of developing interventions to improve patient outcomes. Staff throughout the study site organization can be empowered to make improve patient outcomes if the organization is transparent (Wood, 2011).

Transparency within the health care organization is crucial in order to improve the care that is delivered. Accreditation bodies such as The Joint Commission (TJC) require

that hospital leadership includes performance improvement as a part of their strategic plan and daily operations. Staff should understand how the work that they perform on a daily basis aligns with the organization's strategic plan. The local hospital should be able to serve its community and deliver quality health care (Barnard, 2011). In order to do this an organization needs dedicated staff members who can carry out the strategic plan.

Organizations must strive to improve the quality, safety, and value of health care. This involves a systematic approach and participation of stakeholders. Standard competency with every staff member should include some aspect of performance improvement (Barnard, 2011). As with any initiative to improve health care, performance improvement embraces aspects to enhance quality, increase safety, reduce cost, increase efficiency, and promote effective patient-centered care (Ogrinc et al., 2015).

Purpose

The study site organization does not implement process improvement due to costs, staff distress, and disclosure associated with divulging that there was a problem initially. However, in order to strive for excellence in health care, the organization must engage in performance improvement projects. These projects can improve patient outcomes. Organizations are federally mandated to report clinical outcome statistics for a range of measures (Ogrinc et al., 2015). In addition to these federally mandated measures, results of performance improvement measures are now made public. This necessitates that organizations stay at the forefront of quality in order to be a top performer (Ogrinc et al., 2015). The purpose of this evidence-based practice project was

to collect performance improvement data and present it cumulatively to staff, within the study site organization, in order to engage staff who can then influence patient outcomes at the bedside.

When an organization begins to look at possible performance improvement projects, it is often overwhelming for leadership and staff. A good starting point in choosing a performance improvement project is to review past failures. These failures might have disrupted patient care or negatively impacted patients, staff, or the system as a whole. Failures can be anything that prevents care from reaching its full potential (Ogrinc et al., 2015).

Inviting staff to offer suggestions on how to improve patient outcomes is one method to illicit participation in performance improvement initiatives. Looking first at patient safety events, including near miss events, can help identify system and performance improvement projects specific to an organization. Events that pose an immediate threat of actual or potential harm should be addressed (Ogrinc et al., 2015).

Staff engagement is essential to building a health care system that values patient safety and quality initiatives. Concerns are often heard at the study site organization that nurses have to spend more time nursing the computer than their actual patients. Documentation is a critical but time consuming component of patient care (Keller & Price, 2010). Nurses are forced every day to do more with less, subsequently trying to get nursing committed to incorporating documentation standards or other tasks into their already busy day may be met with resistance. This is why a quality improvement must

start simple and focus on projects that will be perceived by staff as valuable (Ogrinc et al., 2015).

The role of the leader is to engage the staff to fulfill the organization's mission and vision. Empowering the leaders first would allow them to empower their staff. Grossman and Valiga (2009) stated, "People are empowered by others when they are invited to participate in making decisions that will affect their lives, their work, and their futures" (p. 167). Nurses must understand the why behind a process before they will adopt that process (Grossman & Valiga, 2009).

The purpose of this evidence-based practice project was to collect performance improvement data and present it cumulatively to staff who can then influence patient outcomes at the bedside. The data will then be tracked, trended, and analyzed over time through the use of a dashboard. Staff will be made aware of the data and the strategic plans that have been developed to help influence the data. Over time, the organization will be able to see if performance improvement initiatives are having a positive impact on patient outcomes.

Nature of the Study

The study site's quality department analyzes patterns or trends related to all events. The ability to consolidate these data sets in a way that allows the organization to appreciate the outlying occurrences is necessary in order to gain support (Stausmire & Ulrich, 2015). The dashboard was created to allow all data that was collected throughout the study site organization to be readily available. The quality department updates the dashboard on a monthly basis and then publishes the data for staff to view. Leadership

has access to the data at all times to communicate with staff and the ability to look at unit specific data. Leadership is empowered to review data and make changes as needed in order to effectively see a positive shift in data linked directly to patient outcomes.

Projects have to be multidisciplinary. The use of nurses, physicians, support staff, and administration is key to the success of the project. Developing unit champions as a resource will ensure longevity of a project. Unit champions can be any member of staff who can encourage implementation of a project because they are on the unit every day and realize the daily struggles (Zadvinskis, Glasgow, & Salsbury, 2011). The role of the unit champion is to look at his or her role as a partnership between him or herself and the staff in his or her unit. The unit champion is a peer so he or she tends to have the trust, rapport, and respect from other staff in his or her unit. These champions are considered an extension of the nursing education department. This support system is a systematic approach to grow future nurse educators and to build overall competence of the organization. When the staff of the unit feel ownership of the project, results will be realized (Zadvinskis, Glasgow, & Salsbury, 2011).

Significance

The first step in choosing projects for performance improvement is for the organization to decide what types of data will be collected. The Joint Commission (2015) requires that data be collected, trended over time, and analyzed on the following topics: (a) operative or other procedures that place the patient at risk for death or disability, (b) variation from pre and postsurgical diagnosis, (c) adverse events related to moderate sedation/anesthesia, (d) the use of blood products, (e) transfusion reactions, (f)

resuscitation efforts, (g) behavior management/treatment, (h) medication errors, (i) magnetic resonance imaging activities, (j) patient falls, (k) adverse drug reactions, (l) the patient experience, and (m) any other data that leadership chooses to monitor.

Once the data are collected, the results will need to be shared across the entire organization. A dashboard will be developed to capture the overall performance but will also be interactive to allow for individual service lines to drill down to their data.

Without the ability to drill down, improvement cannot be made on individual units.

Allowing the unit to see their progress trended overtime will promote ownership of the data and the outcomes (Barnard, 2011).

Tools will then be developed for leaders in the organization and front-line staff. These tools will show what performance improvement project the service line is currently working on, the interventions that have been selected, and the goals that need to be met. Progress will be monitored and shared in various ways. Safety huddles are brief meetings for sharing information to staff about potential or existing safety concerns and can be a way to interact with staff in order to share ideas. Staff meetings can be used to gain insight and discuss ideas related to the unit's performance improvement goals. Best practice initiatives will be launched to ensure that objectives are fulfilled. Staff involvement is crucial. Without their buy-in, sustainability will not be realized (Barnard, 2011).

Quality improvement tools can assist the organization in implementing process improvement strategies if the entire organization understands how to interpret the data. Once the study site organization is able to analyze the data, initiatives designed to

improve patient outcomes can commence. After implementation of these initiatives, data have to be tracked and trended over time to gain an understanding of what strategies can enhance patient outcomes. Stakeholders in performance improvement include not only the staff of the organization but also the patients, families, and the community (Ogrinc et al., 2015).

Summary

Performance improvement is continual and should be proactive in order to ensure progress toward improving patient outcomes (Rhamy, 2013). Health care cannot be stagnate. In health care, transformation is continuously occurring in order to provide enhanced treatments, innovative equipment, and modern technology. Modification will transpire, but how the organization responds to transformation is ultimately what will define it. Nurses must take the time to develop leadership ability so that they can be the force that heightens the profession's evolution and generates the preferred future (Grossman & Valiga, 2009).

Staff involvement at every level is imperative. Without buy-in from staff at the bedside, strategies will never be fully executed. Staff must be motivated and challenged by the presentation of data as they strive to motivate other units in the organization to ensure that the target of 90% is achieved in all areas. This collaboration should be inspiring and spread beyond performance improvement projects to other areas that need improvement. As culture transformation continues, it will remind the organization of the purpose of health care, which is to meet the needs of the patients and their families (Barnard, 2011). In the next section, nursing theory, relevance to practice, role of the

DNP student, and role of the project team will be discussed as it relates to improving the quality of health care delivery.

Section 2: Background and Context

Introduction

Being a transparent organization in a health care community is difficult. Despite data being publically available, they are often not understood by the organization's staff members or the public. The staff must have an opportunity to view the data in one centralized location and understand the components of that data. Once the data collection tool is available in the organization for quality improvement, then the staff need to use the knowledge to implement new practice changes to ultimately improve patient outcomes.

Nursing Theory

Nursing theory has been used, over the years, to guide practice and improve patient outcomes. By allowing the nurse to apply theory in practice, the nurse can begin to look at patient care through a holistic view and focus on the physical, psychological, and social aspects of the patient (Carpenter, 2010). Duffy's quality caring model was meant to guide practice and to link caring about the human life to administering quality care (Parker & Smith, 2010). This quality caring model allows nurses to see the correlation between providing a great patient experience, implementing best-practice initiatives, and providing an environment of safety. All of these categories are captured in the performance improvement data of the study site organization. Nurses are empowered to help drive performance improvement by providing high quality care.

Nurses are typically caring individuals who want to see the health of their patients' progress. In order to see these positive outcomes, best practice initiatives must

be practiced and a relationship of trust must be built with the patient and their families. When trust is built with the health care team, patients are more likely to actively participate in their care (Parker & Smith, 2010). This relationship helps patients to want to inquire about their illness, modify lifestyle, and be more open to recommended interventions. It is the collaboration between the health care team and the patients that make the patients feel like they are being cared for. Likewise, when patients are able to collaborate with the health care team, the team senses that they have provided quality care. Nursing care is about mutual problem solving. In order to accomplish this, the patient must be involved in the decision-making process (Parker & Smith, 2010).

Relevance to Nursing Practice

Nurses have the potential to improve the quality of care that is delivered. Performance improvement has to encompass the total patient experience. Leaders in quality agree that a performance improvement program that is well designed, executed, and sustained is the most effective solution to reducing patient harm (Barnard, 2011). In order for nurses to take the profession to the next level, they must be willing to actively participate in decision-making processes regarding the type of care that is delivered (Parker and Smith, 2010). Nursing theory must continue to be integrated into practice if the profession of nursing is to evolve in a positive direction. The focus of nursing continues to be on providing safe and efficient care to patients, but without support from nursing theory, outcomes will not be improved. Parker and Smith (2010) stated, “Nursing theory can change nursing practice. It provides direction for new ways of being present with clients, helps nurses realize way of expressing caring, and provides

approaches to understanding needs for nursing and designing care to address these needs” (p. 106).

Local Background and Context

Data collection is necessary to drive performance improvement and enhance patient outcomes. In order to ensure that this is occurring in every organization, the Center for Medicare/Medicaid Services (CMS) developed a star performance rating program. This information is available to the public on the hospital compare website. This website compiles information on over 100 quality measures and allows patients to compare one organization to another. This information is displayed in an easy format and is similar to the star rating methodology that is used at hotels and restaurants. The top hospitals receive five stars, while others are assigned between one and four stars (CORE, 2015).

The quality rating system allows patients to make an informed decision regarding choice of provider or organization. For the organization, if scores are not higher than the scores of competitors, then a patient could choose to take his or her business elsewhere. Patients now have a choice and organizations who are not performing well are feeling the effect financially. In order for the organization to stay in business, it must perform well (CORE, 2015). In order to perform well, staff must understand what quality measures are being reported and their role in improving the delivery of health care (Keller & Price, 2010).

The first category in the star rating report is mortality (Core, 2015). Total inpatient deaths are reviewed, and then a rate is calculated per 100 discharges. Mortality

is also categorized using the following diagnosis: acute myocardial infarction, chronic obstructive pulmonary disease, heart failure, pneumonia, and ischemic stroke. Mortality in patients who were readmitted to the organization is also taken into account, as well as all deaths in surgical patients that had serious but treatable complications (CORE, 2015).

The second category in the star rating report is safety of care (CORE, 2015). This category is one that is already measured by CMS in the hospital acquired condition (HAC) reduction program. This program is comprised of central-line associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), surgical site infection (SSI) from colon, hysterectomy, and total joint surgery, multiresistant staph aureus (MRSA) bacteremia, clostridium difficile, pressure ulcers, iatrogenic pneumothorax, central venous catheter related blood stream infections, postoperative hip fractures, postoperative pulmonary embolism/deep vein thrombosis, postoperative sepsis, postoperative wound dehiscence, and accidental puncture/laceration during a surgery. Failure to perform well in the HAC reduction program will reduce Medicare/Medicaid reimbursement by one percent (CMS, 2015).

The third category in the star rating report is readmission (CORE, 2015). If a patient is readmitted to any hospital within 30 days of discharge, CMS deducts points from this category. This is to encourage hospitals to ensure that patient education is conducted and that support is given to the patient from the community at discharge. Pneumonia, stroke, acute myocardial infarction, chronic obstructive pulmonary disease, heart failure, total joint, and coronary artery bypass graft surgery patients are included in this rating (CORE, 2015).

The fourth category in the star rating report is patient experience (CORE, 2015).

This category is directly from the Hospital Consumer Assessment of Health care Providers and Systems (HCAHPS) survey. This survey is given to patients after they are discharged to discover what their experience was while they were in the hospital (HCAHPS, n.d.). Questions are asked related to the cleanliness of the hospital, communication from nurses and doctors, responsiveness of the hospital staff, how well the patient's pain was managed, if medication management and discharge instructions were communicated effectively, how quiet the hospital was at night, the overall rating of the hospital, and the willingness of the patient to recommend the hospital to friends and family (CORE, 2015).

The fifth, sixth, and final categories are all components of the core measure composite that Joint Commission (2016) recognizes as a national quality measure. The fifth category is effectiveness of care. This category includes instructions given at discharge, the offering of the influenza immunization, aspirin given at arrival for a patient experiencing an acute myocardial infarction, reducing the number of patients leaving the emergency department without being seen, getting a radiology study within 45 minutes of arrival for a diagnosis of acute ischemic or hemorrhagic stroke, reducing the number of elective deliveries prior to 39 weeks gestation, providing venous thromboembolism prophylaxis, providing thrombolytic therapy to stroke patients, and discharging stroke patients home on a statin medication (CORE, 2015).

The sixth category is timeliness of care (CORE, 2015). In this category, time is measured from emergency department arrival to discharge, admission decision to arrival

to inpatient unit, transfer to another facility for acute coronary intervention, door to electrocardiogram in patients with chest pain, door to evaluation by a qualified medical professional, and arrival in the emergency department to pain management with a diagnosis of long bone fracture. The seventh category ensures the efficient use of medical imaging with magnetic resonance imaging (MRI) for low back pain, computed tomography (CT) of the abdomen and thorax, cardiac imaging for preoperative risk assessment, and the simultaneous use of brain and sinus CT (CORE, 2015).

The star rating is based on whether the hospital scores above, below, or the same as the national average (CORE, 2015). Each category is weighted differently. Categories 1 through 4 are weighted at 22%. Categories 5 through 7 are weighted at 4%. These scores are then compared to the national average score. In each category, the hospital is reported to be below the national average, the same as the national average, or above the national average (CORE, 2015). The data collection categories in the star rating are some components of data collection in the organization but do not represent all performance improvement initiatives that are required to be collected by accrediting bodies.

Role of the DNP Student

The project will be implemented in a health care system on the east coast of the United States. This 207 bed facility has served the area since 1925. This organization is accredited by the Joint Commission. This acute care hospital has two telemetry floors, two medical-surgical floors, an intensive care unit, an emergency department, a family birthing center, inpatient and outpatient rehabilitation, surgical suites, diagnostic cardiac

catheterization, endoscopy, inpatient and outpatient wound center, a geropsychiatric unit, a sleep center, and a women's breast health center (CHS, n.d.).

An ideal performance improvement plan is consistent with the mission and vision of the organization (Keller & Price, 2010). It includes involvement from internal and external customers. Tools are used to assess the performance of the organization. A multidisciplinary approach is used to assess the need for performance improvement, develop solutions, and to monitor for sustainability (Barnard, 2011). As the DNP student, I will act as the coach for performance improvement in conjunction with the chief nursing officer.

Role of the Project Team

Performance improvement is a multidisciplinary approach that has to involve staff from all levels. Senior leadership is responsible for developing a strategic plan for the organization annually. Quality is a component of this plan because it paves the way to improving patient outcomes and reducing the cost of health care (Barnard, 2011). Hospital directors, management, unit champions, nursing staff, supportive staff, and members of the community are all a part of the performance improvement team. Having such a wide variety of members on the team ensures that the team has the authority to implement change, resources needed to make change happen, and the knowledge of daily workflow (Barnard, 2011).

One model for developing a performance improvement team is to implement a coached team. In this model, a coach or facilitator is used to organize the performance improvement efforts of the organization. The coach ensures that the team is working

together collaboratively, understands the significance of the data that are being monitored, and develops strategies to engage all staff in performance improvement projects (Barnard, 2011).

Summary

A multidisciplinary approach to performance improvement is imperative to the success of the organization. An organization must seek to make improvements in order to keep up with the demand for safe and effective care. Public reporting of quality measures seeks to improve patient outcomes and the success of an organization depends upon the star rating that the organization can achieve. In the next section, the practice focused question, sources of evidence, data collection, and data analysis will be reviewed.

Section 3: Collection and Analysis of Evidence

Introduction

According to Duffy's quality caring model, staff can be engaged in the process of developing interventions to improve patient outcomes (Parker & Smith, 2010). The growing concern at the project site is the engagement of staff in the organization and the engagement of hospital leadership in performance improvement. In order to successfully improve the organization's performance, leadership must focus on quality as part of their strategic planning. Involvement of directors, managers, nursing, support staff, and unit champions should all be a part of the strategy to strive for better patient outcomes (Community Cares, 2015).

Practice-Focused Question

Engaging staff in performance improvement initiatives can be challenging. Knowledge is key. Staff often is not aware of the data that are collected by the organization and how that data are being used to design new processes that aim to improve patient care. The practice-focused question encompasses what would occur, if a tool that allowed frequent data trending was used to measure effectiveness of staff to influence key outcome measures. Once the data collection tool is available in the organization for quality improvement, then staff will need to use the knowledge to implement new practice changes to ultimately improve patient outcomes (Keller & Price, 2010).

Sources of Evidence

The project site's quality department already collects data on hundreds of measures. However, the data is currently being collected, but not shared in a meaningful way with the rest of the organization. As the organization seeks to become more transparent, it is important to present the data in a fashion that is easy to use, easy to interpret, and is readily available (Keller & Price, 2010).

The public-reported star rating that is available on hospitalcompare.gov is a detailed overview of the hospital's performance. There are six categories that an organization is rated on and compared to other organizations in the nation. Mortality, safety of care, readmission, the patient experience, and core measure data are all included in this report. The star rating is based on whether the hospital scores above, below, or the same as national average (CORE, 2015).

The more informed staff are about the measures that are publically reported, the more likely they are to be involved in the processes to improve quality. The staff need to understand how the organization compares to other organizations. They need to understand what the organization's mission and vision is and how that aligns with quality improvement. The more the organization talks about quality, the more likely best-practice initiatives become hardwired. In order to execute a framework of quality, goals have to be aligned with behavior and processes. This is necessary to obtain and sustain desired results (Community Cares, 2015).

Archival and Operational Data

The quality manager and the chief nursing officer are responsible for all data collection within the organization. In order to stay ahead of public reporting, it is imperative that the organization collect its own data. Public reporting is currently two quarters behind on data collection. This means that at minimum all data that are reported publically needs to be collected, trended, and analyzed in real time. Only then can the organization make differences that will improve the star rating and the quality of care it delivers.

A dashboard will need to be created that will store all the results of the data collection. This data will be categorized by core measures, hospital-acquired conditions, infection prevention, high reliability and patient safety, performance improvement, and patient perception. The purpose is to collect performance improvement data and present it cumulatively to staff, within the study site organization, in order to engage staff who can then influence patient outcomes at the bedside. The dashboard will ensure that the data is presented in a way that is easy to understand. Staff will need access to these data at all times. Managers will need to talk about the results of these data with their staff at least monthly. Data will also be presented by the quality department at meetings such as Patient Safety, Department Directors, Medical Executive Committee, Medical Staff Performance Improvement and Patient Safety Committee, Board of Trustees, Nurse Director, and Safety Huddle. It is important that the quality department is transparent about the results of the data collection so that the organization can make decisions that will affect patient outcomes.

The organization has partnered with HealthStream. This company is responsible for performing surveys via phone, mail, and e-mail to gather data regarding the patient experience. Their goal is to give the organization data that will help develop and engage the staff within the organization. Because they are a contracted service, they are able to collect impartial data and help identify target areas for the organization (HealthStream, n.d.).

Analysis and Synthesis

The dashboard will be created using Microsoft Excel. This will allow for organization of the data and results to be trended over time using graphs. The first tab of the Excel spreadsheet is the table of contents. There will be hyperlinks set up to allow the user to toggle between tabs related to core measures, hospital-acquired conditions, infection prevention, high reliability and patient safety, performance improvement, and patient perception.

Once the user clicks on the core measures link, there will be four reports that can be viewed. The first shows a total of all the core measure programs, which includes the inpatient setting core measures, the behavioral health core measures, and the emergency department core measures (See Table 1).

Table 1

Core Measures and their Components

Inpatient Core Measures	Behavioral Health Core Measures	Emergency Department Core Measures
Global Immunization	Hospital Based Inpatient Psychiatric Care	Acute Myocardial Infarction
Stroke	Tobacco	Chest Pain
Venous Thromboembolism		Stroke
Sepsis		Throughput
Perinatal Care		
Tobacco		

Under the inpatient setting core measures, the following components are reported: global immunization, stroke, venous thromboembolism, sepsis, perinatal care, and tobacco. Behavioral health core measures include hospital-based inpatient psychiatric care and tobacco. Emergency department core measures include acute myocardial infarction, chest pain, stroke, and throughput. Each of these core measures also has sub measures (See Tables 2-4), which provide even a deeper drill down of data (The Joint Commission, 2016). The user will also have a button that they can click to take them back to the table of contents on any page within the dashboard.

Table 2

Subcomponents of Inpatient Core Measures

Global Immunization	Stroke	Venous Thromboembolism	Sepsis	Perinatal Care	Tobacco
Influenza Immunization	Thrombolytic Therapy	VTE Discharge Instructions	Early Management Bundle Severe Sepsis/ Shock	Elective Delivery	Tobacco Use Screening
		Hospital Acquired Potentially Preventable		Cesarean Section	Tobacco Use Treatment Provided/ Offered
				Antenatal Steroids	Tobacco Use Treatment Provided/ Offered at Discharge
				Health Care Associated Bloodstream Infections in Newborns Exclusive Breast Milk Feeding	

Table 3

Subcomponents of Behavioral Health Core Measures

Hospital Based Inpatient Psychiatric Care	Tobacco
Multiple Antipsychotic Medications at Discharge with Justification	Tobacco Use Screening
Alcohol Use Screening	Tobacco Use Treatment Provided/Offered
Influenza Immunization	Tobacco Use Treatment Provided/Offered at Discharge

Table 4

Subcomponents of Emergency Department Core Measures

Acute Myocardial Infarction	Chest Pain	Stroke	Throughput
Fibrinolytic Therapy Received within 30 Minutes	Aspirin at Arrival	Head CT/MRI Results with Scan Interpretation within 45 Minutes of Arrival	Median Time from ED Arrival to ED Departure for Admitted ED Patients
Aspirin at Arrival			Admit Decision Time to ED Departure Time for Admitted Patients
			Median Time from ED Arrival to ED Departure for Discharged ED Patients
			Door to Diagnostic Evaluation by a Qualified Medical Professional
			Median Time to Fibrinolysis
			Median Time to ECG for AMI Patients
			Median Time Transfer to Another Facility for Acute Coronary Intervention
			Median Time to ECG for Chest Pain Patients
			Median Time to Pain
			Management for Long Bone Fracture

Once the user is back on the table of contents, the next section they can click on will be for the hospital-associated conditions (HAC). Two programs make up the HAC program: National Healthcare Safety Network (NHSN) and the Agency for Healthcare

Research and Quality (AHRQ; See Table 5). The NHSN program houses all the infection prevention data and the AHRQ houses all the patient safety indicators. Under the NHSN program data for central-line-associated blood stream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), C.-Difficile, multiresistant Staph Aureus (MRSA), and surgical site infections (SSI) for colon and abdominal hysterectomy are included. The AHRQ composite consists of pressure ulcers, iatrogenic pneumothorax, central venous catheter-related blood stream infections, postoperative hip fractures, postoperative PE/DVT, postoperative sepsis, postoperative wound dehiscence, and accidental puncture/laceration.

Table 5

HAC Reduction Program

NHSN	AHRQ
CLABSI	Pressure Ulcers
CAUTI	Iatrogenic Pneumothorax
C-diff	Central Venous Catheter Related Blood Stream Infection
MRSA	Postoperative Hip Fracture
SSI	Postoperative PE/DVT
	Postoperative Sepsis
	Postoperative Wound Dehiscence
	Accidental Puncture/Laceration

Once the user is back on the table of contents tab, the next link is the infection prevention tab. This tab consists of CLABSI, CAUTI, MRSA, SSI, ventilator-associated conditions (VAC), infection ventilator-associated complication (IVAC), ventilator-associated pneumonia (VAP), vancomycin resistant enterococci infection (VRE), and handwashing compliance. Each of these components is reported as the number of events and as a rate that is calculated per 1,000 patient days (See Table 6).

Table 6

Infection Prevention

Infection Prevention
CLABSI
CAUTI
MRSA
SSI
VAC
IVAC
VAP
VRE
Handwashing

The next link that the user can click on once navigated back to the table of contents is the high reliability and safety tab. Under the reportable section, the organization can learn about new claims that have been filed and probable claims submitted to corporate legal, sentinel events, and Department of Health and Environmental Control (DHEC) reportable injuries. Response time to all complaints and grievances are also tracked until completion. The next section captures patient safety data such as the number of serious safety events, the serious safety event rate, the number of precursor safety events, and the number of near miss events that were reported. In the category of safety initiatives, the following are tracked: foreign objects retained after surgery; air embolism; blood incompatibility; manifestations of poor glycemic control; SSI following spine, neck, elbow, shoulder, or cardiac implantable electronic device; and trauma/falls with injury. The fall rate per 1,000 patient days is also calculated for all inpatient acute care falls, behavioral health falls, and rehabilitation falls (See Table 7).

Table 7

High Reliability and Patient Safety

Reportable	Complaints and Grievances	Patient Safety	Safety Initiatives	Falls
New Claims Filed	Days between discovery and risk management review	Serious Safety Events	Foreign Objects Retained After Surgery	Inpatient acute fall rate
Probable Claims Submitted	Days between discovery and manager review	Serious Safety Event Rate	Air Embolism	Behavior health fall rate
Sentinel Event	Days between discovery and completion	Precursor Safety Events	Blood Incompatibility	Rehabilitation fall rate
DHEC Reportable Injuries		Near Miss Safety Events	Manifestations of Poor Glycemic Control SSI Following Spine, Neck, Elbow, or Shoulder Procedures SSI Following Cardiac Implantable Electronic Device Trauma and Falls with Injury	

The next link on the table of contents will take the user to the fall data. These data are important as they allow each individual unit to drill down to specifics within each fall event. The first drill down is the type of event. This event could be a fall without injury, a fall with injury, or a fall with a serious injury. The unit could then look at when most of the falls are occurring by shift or by day of the week. This can be important to determine if most falls occurs when there are less staff on the units like at night or on the weekend. Another important factor to consider is the patient's age, their mental status, and what fall risk score the nursing assessment revealed before the fall occurred (See Table 8).

Table 8

Falls

Drill down for fall data
Type of Event
Shift
Day of the Week
Age Range
Mental Status at the time of fall
Fall Risk Score documented immediately before fall

The next link on the table of contents is all the data that the organization collects toward its goal of performance improvement. Blood use, critical labs, moderate sedation, mortality, organ donation, restraint usage, resuscitation efforts, and surgical appropriateness were the topics that the organization chose in their strategic planning sessions. Each topic has identified questions that the quality reviewer must ask in order to successfully recognize opportunities for improvement (See Table 9).

Table 9

Performance Improvement

Blood Utilization	Critical Labs	Moderate Sedation	Mortality	Organ Donation	Restraint Usage	Resuscitation Efforts	Surgical Appropriateness
Crossmatch/Transfusion Rate (CT Ratio)	Reported to Nursing	Non-OR Invasive Procedures requiring Moderate Sedation	Total Inpatient Deaths	Timely Referral Rate (within 1 hour of death)	Acute Care	Code Blue-Successful Resuscitation	Clinical Indicator Met
Confirmed Non-Hemolytic Transfusion Reactions	Reported to Provider within 30 minutes	Complications	Mortality Rate		ICU	Timely Response	Complications
Confirmed Hemolytic Transfusion Reactions		Use of Reversal Agent	Post-Surgical Deaths			Appropriateness of Interventions	Use of Reversal Agent
Meeting Transfusion Criteria		Unplanned Hospital Admission	Readmission Mortality			Function & Availability of Equipment	Unplanned Hospital Admission
Documentation Compliance		Pre-Sedation	Hospice/Comfort Care			Prevention of Clinical/Patient Care Issues	Pre-Sedation
		Informed Consent	Autopsy Criteria			Technique/Procedure	Informed Consent
		Time Out	Autopsy Performed			Rapid Response-Timeliness	Time Out
		Case Start	DRG Mortalities			Progression to a full code	Case Start
		Post-Procedure	AMI			Transferred to the ICU	Post-Procedure
			COPD				
			Heart Failure				
			Pneumonia				
			Stroke				
			Surgical Inpatient				

The final link that the user can click on is the patient perception data. Patient perception data is the data collected by HealthStream that is turned into CMS for the HCAHPS survey. If the patient experienced an inpatient stay then questions are asked in the following categories: Overall satisfaction rating, communication with nurses, responsiveness of hospital staff, communication with doctors, cleanliness and quietness of the hospital environment, pain management, communication about medicines, and discharge information. If the patient experienced an outpatient stay then questions are asked in the following categories: Overall satisfaction rating and willingness to recommend (See Table 10).

Table 10

Patient Perception

Inpatient	Outpatient
Overall Satisfaction Rating	Overall Satisfaction Rating
Communication with Nurses	Willingness to Recommend
Responsiveness of Hospital Staff	
Communication with Doctors	
Cleanliness & Quietness of the Hospital Environment	
Pain Management	
Communication about Medicines	
Discharge Information	

Having all of the data in one centralized location will be a huge success for the organization. The Quality department will be trained to utilize the tool and will be the department responsible for keeping the dashboard updated. Separately the tabs on the dashboard represent many different programs that are required by CMS and TJC.

Together parts of all the tabs on the dashboard make up the overall quality star rating of

the hospital. Getting staff to understand all of the components that are included in the star rating is the first step to making an impact.

Summary

In order to make the changes necessary in healthcare to improve patient outcomes and improve the quality of care that is delivered, leadership and staff must be engaged in the process. The dashboard seeks to bring order and clarity to performance improvement. Having this data continuously presented in different forums and readily available for staff will allow progress. Getting everyone involved will build broad ownership and lead to change within the organization (Keller & Price, 2010). In the next section, the role of the doctoral project team will be discussed as well as the findings of the project, the strengths, the limitations, and the recommendations.

Section 4: Findings and Recommendations

Introduction

Staff engagement is essential to building a health care system that values patient safety and quality initiatives. Nurses are forced to do more with less, subsequently trying to get nursing committed to incorporating documentation standards or other tasks into their already busy day may be met often with resistance. This is why quality improvement must start simple and focus on projects that will be perceived by staff as valuable (Ogrinc et al., 2015). In order to successfully implement change within the practicum site, the organization must understand the workflow and frustrations that the staff is faced with. Once there is a common understanding, staff should be involved in the decision making. Without staff buy-in process improvement will not sustain.

Findings and Implications

The Centers for Medicare/Medicaid have published data on over 4,000 hospitals nationwide. Consumers can go to hospitalcompare.gov and choose up to three organizations to compare. Organizations can be compared on mortality rates, events related to safety, the number of infections, readmission rates, patient experience, effectiveness of care, and timeliness of care. If the organization-reported measures are not in alignment with the national averages, then the patient may choose another organization to get their care from (CORE, 2015). This puts the control in the hands of the consumer.

The Quality Star Report will be released twice a year in June and December. CMS will allow organizations to view their results 2 months prior to it being released

publically. When the study site organization had their first release in June 2016, the categories of safety and timeliness of care were scored below national average. Efforts were focused on these two categories to improve the overall rating. Data in the category of safety of care are updated quarterly while timeliness of care is updated annually. The earliest the study site organization can expect to see a change in scoring with timeliness of care is June 2017. The overall score for safety of care in the study site organization made improvements from below national average to the same as national average. This upward trend is a direct reflection of the mission of the two workgroups whose data are reported in this category: patient safety and infection prevention.

Facility	Star Rating	Mortality	Safety	Readmission	Patient Experience	Effectiveness of care	Timeliness of care	Imaging
Study Site Organization June 2016 Release	★ ★ 3 ★	same	below ↓	same	same	above ↑	below ↓	same
Study Site Organization December 2016 Release	★ ★ 3 ★	same	same	same	same	above ↑	same	same
		Above= Above National Average		Same= Same as National Average		Below= Below National Average		

Figure 1. Study site comparative data.

Organizations must focus efforts on performance improvement in order to survive not only the Medicare penalties that are put in place for poor performance but also the consumers' right to choose based on publically reported data. Ethical implications should also be considered. The four main principles of ethics include autonomy, beneficence, non-maleficence, and justice (Laureate Education, Inc., 2010). Autonomy refers to giving the patient options to help make decisions. Beneficence is providing quality care

to the patient. Nonmalfeasance is doing no harm to the patient. Justice is fairness and equality for all (Laureate Education, Inc., 2010). The role of the organization is to balance the legal and ethical implications when providing care to the patient.

Legally and ethically, the organization must provide exceptional care. The Quality Star Report compares data on autonomy when it reports whether or not the patient's preferences were considered when providing care. The Quality Star Report compares data on all quality of care metrics such as the number of infections, readmission, and mortality. The Quality Star Report compares data on safety measures to ensure nonmalfeasance. Justice is also considered as CMS has enabled these data to be publically reported to ensure that the patient has these data available to him or her.

The impact that this publically reported data set has on the organization and the community is huge. The organization runs the risk of closing its doors if they do not provide high quality care to the members of the community. The community holds the power state that poor performing organizations will not provide their health care.

Recommendations

When an organization collects performance improvement data, the data should be readily available to the staff. The data should be presented in a way that is easy to understand. Once the staff understands the data, they then need to recognize how they can influence the data. Getting staff involvement in decision making is imperative to the sustainability of a project. Data should be tracked and trended over time so that staff can easily see when improvements are being made or if there is a decline in performance (Wood, 2011).

Contributions of the Doctoral Project Team

The doctoral project team is comprised of multidisciplinary professions that involve staff from all levels. Influence starts from above with the senior leadership team that is responsible for developing the annual strategic plan for the study site organization. The senior leadership team is responsible for motivating all of the other members of the team (Barnard, 2011).

The team is also composed of hospital directors, management, unit champions, nursing staff, supportive staff, and members of the community. Having such a wide variety of members on the team ensures that there is authority to implement change, resources needed to make change happen, and the knowledge of daily workflow (Barnard, 2011). These team members are responsible for the implementation and education of performance improvement activities. The team members are responsible for motivating the entire organization. If the team members are not engaged then all of the other staff members within the organization will not have buy-in. Without buy-in, change may not occur and will certainly not sustain.

The first step in engaging the project team was to help them understand the data that are publically reported and how they affect the study site organization's overall quality star rating. The various sections of the quality star report were reviewed, and the data associated with each category were reported. After the team understood how the study site organization compared to the national average, they were able to start thinking of ways to improve patient outcomes.

Small workgroups were developed to look at the categories of the Quality Star Report: mortality, safety of care, readmission, patient experience, effectiveness of care, timeliness of care, and efficient use of medical imaging (CORE, 2015). These workgroups were responsible for analyzing the data and developing strategies to improve the data. Once strategies were developed, the workgroups reported back to the project team to decide which strategies would be implemented. The organization uses the Plan Do Study Act (PDSA) cycle for performance improvement activities. PDSA stands for planning the improvement do the initiative and see what change results on a small scale, study the results to determine if the change can be implemented on a larger scale, and act on the results. Using this type of model can influence change without leading to staff frustration (Wood, 2011).

Each workgroup will develop strategies to improve the data. As the local organization improves in an area, then the national average also improves, giving every local organization in the nation a new target (CORE, 2015). Performance improvement is a process that is crucial to the future of health care. An organization must seek to make improvements in order to keep up with the demand for safe and effective care. Public reporting of quality measures seeks to improve patient outcomes and the success of an organization depends upon the star rating that the organization can achieve (Barnard, 2011).

Strengths and Limitations of the Project

A strength of the project was that the dataset was readily available through CMS Hospital Compare. The study site organization already knew that the Quality Star Report

would be releasing for the first time in July 2015 and were already tracking the data associated with the report. The continual tracking of these data allowed the workgroups to understand how the data were affected when process improvements were put into place and if additional improvements needed to be made to show a positive reflection in the trend line.

A second strength of the organization was the leadership support to form workgroups and look at making changes toward process improvement. Due to leadership support, multidisciplinary workgroups were able to be formed. The use of unit champions was established as an extension of these workgroups to take the information to the bedside. The use of unit champions is a systematic approach to grow future nurse educators and to build overall competence of the organization. When leadership empowers the staff to feel ownership of the project, results will be realized (Zadvinskis, Glasgow, & Salsbury, 2011).

The limitation of the project was that some of the components of the dataset, specifically mortality and readmission, are difficult to make rapid process improvements. These categories take into account patients who were discharged from the organization up to 30 days. So if a patient was in a car accident and died, then this mortality would go against the organization if they were seen within 30 days with a diagnosis acute myocardial infarction, chronic obstructive pulmonary disease, heart failure, pneumonia, or ischemic stroke. The same is true if a patient is readmitted to any hospital, not just the one they were discharged from, within 30 days of discharge. The same patient could be discharged from the hospital with heart failure but readmitted with a broken leg and the

organization would still lose points in this category (CORE, 2015). Changes to these two categories take community involvement and partnerships with other organizations to assist patients. In the next section, the dissemination of the plan will be discussed.

Section 5: Dissemination Plan

Introduction

The purpose of this evidence-based practice project was to collect performance improvement data and present it cumulatively to staff who can then use the data to improve practice and influence patient outcomes. A dashboard was created to organize the study site's performance improvement data. The data were tracked, trended, and analyzed over time through the use of the dashboard. Staff and managers had access to the dashboard on the study site's intranet so that informed contributions to strategic planning were possible. With strategic initiative buy-in from the frontline staff, the study site organization has begun seeing a positive impact on patient outcomes.

The study site organization is part of a huge health system with 159 organizations. This evidence based project could be implemented across all organizations. Consistency in tracking and reporting measures would be beneficial to a health system in order maintain a constant message and reduce variation. It is only then that best-practice initiatives can be shared across a health system in order to improve outcomes nationwide.

Analysis of Self

Walden University has a vision to see nursing transformed by producing critical thinkers and educators that use evidence-based practices to guide teaching. Nurses not only need to know how to perform a skill, they need to be able to perform that skill correctly so that they will not cause harm to their patients. At my current organization, I sit on the committees that help drive evidence based practice and I am also responsible for providing that information to the bedside nurse. I have found that nurses want and

need to know the "why" behind doing things. Once they know the "why" they start using the evidence based practice guidelines and we see a reduction in harm indexes, an improvement in the way care is delivered, and an increase in patient satisfaction.

My long term professional goal is to work for an organization that is constantly seeking new ways to increase performance. When quality and safety are at the top of every decision that is made, the organization has a recipe for success. Nursing involves a holistic approach as professionals examine the physical, mental, and social aspects of a patient's well-being. Performance improvement projects must be designed with a holistic framework in mind. This project has taught me that quality encompasses so many different aspects of care. The quality star report is just the beginning as the government challenges organizations to think about the future outcomes for the well-being of the community.

Summary

The purpose of this evidence based practice project is to collect performance improvement data and present it cumulatively to staff, within the study site organization, in order to engage staff who can then influence patient outcomes at the bedside. A dashboard was then utilized to track, trend, analyze data over time. Staff was made aware of the data and the strategic plans that have been developed to help influence the data. Over time the study site organization was able to see that by engaging staff in performance improvement data and initiatives there was a positive impact on patient outcomes.

References

- Barnard, C. (2011). *Chapter leader's guide to performance improvement: Practical Insight on Joint Commission Standards*. Danvers, MA: HCPro, Inc.
- Carpenter, R. (2010). Using story theory to create innovative honors level nursing course. *Nursing Education Perspectives*, 31(1), 28-32.
- Center for Medicare/Medicaid Services. (2015). *HAC Reduction Program*. Retrieved from [http:// cms.gov](http://cms.gov).
- Center for Outcomes Research & Evaluation (CORE). (2015). Hospital Quality Star ratings on hospital compare June 2015 dry run methodology of overall hospital Quality Star Ratings. Retrieved from: <https://www.qualitynet.org>.
- Community Health System (CHS). (n.d.). *Welcome*. Retrieved from <http://www.maryblackhealthsystem.com/mary-black-health-system/aboutus.aspx>
- Community Cares. (2015). *Leadership handbook*. Franklin, TN: Healthcare Performance Improvement, LLC.
- Grossman, S. C., & Valiga, T. M. (2009). *The new leadership challenge: Creating the future of nursing* (3rd ed.). Philadelphia, PA: F. A. Davis Company.
- HealthStream. (n.d.). *Patient experience*. Retrieved from <http://www.healthstream.com/solutions/patient-experience>
- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS). (n.d.). Retrieved from <http://hcahpsonline.org>.
- Joint Commission Edition. (2015). Retrieved from <https://edition.jcrinc.com/Frame.aspx>

- Keller, S. & Price, C. (2010). *Performance and health: An evidence-based approach to transforming your organization*. New York, NY: McKinsey & Company.
- Laureate Education, Inc. (2010). "Legal and Ethical Aspects of Healthcare Delivery"
Walden University: Policy and Politics in Nursing and Healthcare. Baltimore, MD: Dr. Jack Schwartz, Dr. Gloria Ramsey, Dr. Nneka Mokwunye, & Dr. Lynda Rushton.
- Ogrinc, G., Davies, L., Goodman, D., Batalden, P., Davidoff, F., & Stevens, D. (2015). Squire 2.0 (Standards for Quality Improvement Reporting Excellence): Revised publication guidelines from a detailed consensus process. *Medwave, 15*(10), 6318. doi:10.5867/medwave.2015.10.6318
- Parker, M. E., & Smith, M. C. (Eds.). (2010). *Nursing theories & nursing practice (3rd ed.)*. Philadelphia, PA: F. A. Davis Company.
- Rhamy, J. (2013). Performance improvement: What gets measured gets managed. *Clinical Leadership & Management Review, 27*(4), 16-19.
- Stausmire, J., & Ulrich, C. (2015). Making it Meaningful: Finding quality improvement projects worthy of your time, effort, and expertise. *Critical Care Nurse, 35*(6) 57-62. doi:10.4037/ccn2015232
- The Joint Commission (TJC) (2016). *Core measures*. Retrieved from:
jointcommission.org
- Wood, D. (2011). *Nurses driving quality improvement initiatives*. Healthcare News. Retrieved from: <http://www.amnhealthcare.com/latest-healthcare-news/nurses-driving-performance-improvement-initiatives/>

Zadvinskis, I., Glasgow, G., & Salsbury, S. (2011). Developing Unit-Focused Peer Coaches for the clinical Setting. *Journal of Continuing Education in Nursing*, 42(6), 260-269.