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An Outcome Evaluation of an Evidenced-Based Leadership Framework on Nursing Retention in a Tertiary Medical Center

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This is to certify that the doctoral study by

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Abstract

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by

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MS, Walden University, 2009

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Project Submitted in Partial Fulfillment

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Abstract

An evidence-based leadership (EBL) framework is an intervention designed to facilitate

organizational changes such as the reduction of nursing turnover and the improvement of

nursing job enjoyment. This project provides an overview of the effect of nursing

turnover on an organization, presents the components of the EBL framework, and

provides an evaluation of the influence of EBL on nursing turnover and job enjoyment.

The EBL framework provided a method for reducing variance in leadership skill and

behavior by outlining specific methods necessary to reduce inconsistency. The project

objective was to determine if the implementation of an EBL framework for 820 nurses on

10 clinical units at a tertiary medical center improved turnover and job satisfaction, as

evidenced by turnover data from the unit-specific dashboards and the National Database

of Nursing Quality Indicators (NDNQI) job enjoyment scores. All data were collected

retrospectively from 2 specific time points spanning pre-implementation to post-

implementation of the EBL framework. The t-test results indicated no statistically

significant improvement in turnover percentages or job enjoyment scores 7 months after

the implementation of the EBL framework. The results could be attributed to factors

including senior leadership turnover, lack of specific accountability measures for failure

to implement the EBL framework, and the restricted time frame of the evaluation period.

However, the evaluation provides a baseline for future longitudinal studies to determine

if an EBL framework can influence nursing turnover and job enjoyment after having been

in place longer than the 7 months post implementation used for this evaluation.

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Dedication

I dedicate this project to my grandchildren, Zane, Gracie, Hazel, Gray, Haven, Jaxson, and Lillian. You are without a doubt my joy on earth. To my girls, Jaclyn, Laci, Renee, Rebecca and Laramie, you are strong confident Texas women and I am so proud of each of you. To my boys, Jeremy, Joshua, Robert, Joey and Jason, you have grown into men that I am thankful to have in my life because you represent all that is good in being a man. I love each of you with my whole heart. You know you are my favorite.

To my friend Apryl, a special thank you for the never ending encouragement and laughter. Sed non ex sanguinibus, sorores animae coniungi.

To my husband, Bruce, thank you for the support, patience and unconditional love you have given me throughout this journey.

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Section 1: Nature of the Project

Background

Many nurses can recall the moment they decided to embark on a career path serving and caring for the needs of others. Upon entering the nursing workforce the challenges associated with employment in healthcare may influence decisions to remain in their current practice setting, seek employment elsewhere, or the leave the nursing profession. Turnover in nursing has an expensive organizational outcome. Controlling nursing turnover is an organizational priority essential for sustainability.

The site for this project is a metropolitan acute care hospital located in Austin, Texas. The hospital is one of the 10 primary hospitals, in the organization, operating in Texas. The hospital is a multi-service-line, magnet-designated facility. The parent organization recently restructured the organizational chart and reporting structure of all 10 facilities. The restructure resulted in a reduction in force (RIF), as an unexpected catalyst for many nurses to voluntarily terminate employment. The hospital nursing turnover was 15.2% or 64.5 full time equivalents (FTEs) in the second quarter of 2014 and increases to 18.9% or 120.8 FTEs in the next quarter. In an attempt to stabilize the rapid departure of nurses, the organization initiated an urgent search for intervention strategies. This search resulted in the selection of the (EBL) framework

Problem Statement

The registered nursing turnover for fiscal year 2015 (FY15) adversely impacted the organization's financial results. In addition, turnover negatively impacts patient safety

and the quality of patient care (Gormley, 2010), (Kalisch, Tschannen, & Lee, 2012). Nurses remaining in the organization experienced challenging working conditions including floating to unfamiliar units, working long hours, and working with less staff. Furthermore, the consequences of Registered Nurse (RN) turnover can include the inhibition of workgroup processes, decreased patient satisfaction, increased length of stay, and increased patient falls and medication errors (Bae, Mark, & Fried, 2010). These conditions are opposite of the best nursing practices prescribed by the forces of Magnet /principles. "The Commission on Magnet determined the original 14 forces of Magnet could be measured by 7 domains or "clusters" of evidence: leadership, resource utilization and development, nursing model, safe and ethical practice, autonomous practice, research, and quality processes" (Wolf, Triolo & Ponte, 2008) (p. 201).

In the United States, the demand for registered nurses is predicted to increase from 2.71 million in 2012 to 3.24 million in 2022 (Bureau of Labor Statistics, 2012). The projections include nearly 525,000 replacement nurses, making the nursing profession a leader in workforce growth (Bureau of Labor Statistics, 2012). Therefore, the current nursing shortage combined with growth predictions, an aging nursing workforce, and nursing turnover suggest future problems for corporate leaders.

The Patient Protection and Affordable Care Act (ACA) further defined the need for organizations to employ and retain nurses who perform at the top of their licenses and certification. The ACA included a quality incentive program called the Value Based Purchasing (VBP) program to shift reimbursement from service volume to patient outcomes. Organizational outcomes are directly related to the nursing culture as high

turnover results in negative patient outcomes (e.g. morbidity and mortality), poor staff and physician satisfaction, and less financial sustainability (Bae et al., 2010; Lake, Shang,Klaus, & Dunton, 2010; North et al., 2013).

Purpose Statement

The purpose of this project was to evaluate the hospital-wide implementation of an EBL strategy at a 534-bed metropolitan, acute care hospital. Specifically, the project evaluated the effect of an EBL intervention on nursing turnover and job satisfaction on 10 clinical units.

The project aim was to determine if EBL had an effect on nursing turnover as reflected in the data in the unit scorecards and the national database for nursing quality indicators (NDNQI) *Job Enjoyment* scores. The hypotheses are:

1. After the implementation of EBL there will be a reduction in nursing turnover.

2. After the implementation of EBL there will be an increase in job satisfaction scores.

A pre–post study design was utilized to analyze data from matched quarters. Turnover data and job enjoyment scores from two specific time points were analyzed during the evaluation of the project. The turnover data were collected from the nursing unit dashboards of the units selected for the project. The NDNQI survey results for job enjoyment were included for assessing indicators for nursing job enjoyment.

Goals and Outcomes

The expected organizational outcome was RN turnover reduction following the system-wide implementation of the EBL intervention. Developed by Studer (2010), the

EBL is a heuristic framework with leadership strategies derived from experiential knowledge and management science. Importantly, the word *heuristic* denotes the simple process, such as the strategies in EBL, designed to replace complex algorithms (Newell & Simon, 1972). Simon (1990), argued heuristics are "methods for arriving at satisfactory solutions with modest of computation" where people seek to reduce the effort associated with decision processes and judgments (p. 11). As later articulated within this study, this heuristic framework can be grounded in classic management theory.

Evidence-based leadership refers to the mechanisms to reduce variations in leadership skills and management processes in order to produce predictable and positive organizational outcomes (Studer, 2010). The EBL strategy utilized three components incorporated as organizational goals for FY15, including: *aligned goals*, *aligned behaviors*, and *aligned processes* (Studer, 2010). Goal alignment is the process of cascading network goals throughout the organization (Studer, 2010). The cascading mechanism provided an overarching system outcome framework with the opportunity for each hospital and individual unit to contribute to the system outcomes through achieving localized goals. Each hospital will develop goals that align with and support the network goals. Each department in the hospital will then develop goals to support the overarching facility goals. Alignment of behaviors is the strategy used to assure consistency in operations. A code of conduct is used to guide the behaviors and it assists with establishing a predictable work environment such as treating coworkers with courtesy and respect. Examples of processes alignment include conducting employee evaluations based on evidence based goals and outcomes, rounding on associates or conducting five

minute meetings with individual staff members once a month, and the hourly rounding on patients by clinical staff.

Significance to Nursing Practice

In order to fully understand the mechanism by which turnover is related to adverse patient outcomes, turnover needs to be considered at the nursing unit level (Bae et al., 2010). Patient length of hospital stay (Bae, Mark & Fried, 2010), patient falls (Lake, Et al., 2010) and medication errors (Delucia, Ott, & Palmieri, 2009) are outcomes directly affected by turnover. The cohesiveness of a well-organized, fully staffed and engaged nursing team enhances communication and responsiveness between providers of care (Bae, Et al., 2010). Evidence Based Leadership (EBL) is a framework designed to develop nursing units with engaged clinicians vigilant in implementing care processes focused on achieving good patient outcomes. For example, Aiken, Burmeister, Clayton, Dalais, & Gardner, (2011) reported incorporating nursing rounds in an intensive care unit improved patient care through good communication. The nursing rounds facilitated 577 changes in care for the 171 patients reviewed (Aiken et al., 2011). Singer and Tucker (2014) stated ". . . safety rounds aimed to improve care by engaging senior managers with work-system challenges faced by frontline staff" (p. 789) which resulted in a culture of safety and trust (Institute of Medicine , 2004; Kohn, Corrigan, & Donaldson, 2000) and organizational trust (Bobbio, Bellan, & Manganelli, 2012). However, there is a significant limitation with the previous work (Palmieri, Petersen, Flit, & Saettone, 2010). The walking rounds have been extensively used in practice; these are often tested in cross-sectional studies with measurement by perception surveys and not empirical

outcome. Furthermore, research findings have indicated short-term benefit but without longitudinal studies, many scholars question the long term efficacy (Clark, 2006; Thomas, Sexton, Neilands, Frankel & Helmreich, 2005; Palmieri, et al. 2010).

Understanding the relationship between management leadership style and nurses' intent to stay in current employment is fundamental to staff retention (Cowden, Cummings, & Profetto-McGrath, 2011). Herman, Tse, Xu and Wing (2013) drew upon the social exchange theory to propose how "social exchange processes occur between an employee and his /her supervisor and between the employee and his/her organization as a whole to underpin the effect of transformational leadership on turnover outcomes" (p. 763). Understanding the characteristics of transformational leadership, including the science of leadership, can provide for a healthier work environment (Weberg, 2010). Based on transformational leadership theory Malloch (2014) advocated for leader-behaviors to center on the "individual's higher order need for achievement, self-esteem, and self-actualization" (p. 61). In testing the theoretical relationships in the public employee sector, Caillier (2014) found that goal clarity in conjunction and collaboration with transformational leadership influenced turnover intentions.

Evidence-Based Significance

Leadership practices influence nurses' perception of job satisfaction and their intent to leave employment (Caillier, 2014; Upenieks, 2003; Weberg, 2010). In a systematic review, Cowden, Cummings, and Profetto-McGrath (2011) reported a positive relationship between transformational leadership, supportive work environments and nurses' intent to stay. Additionally, they found positive relationship between

transformational leadership and nurses' intent to stay as well as a negative correlation between autocratic leadership styles. The operational impact of turnover is visible with increased length of stay (LOS), more medication errors, and greater numbers of patient falls (Bae, ET al. 2010).

Annually, more than 200,000 unintended but preventable patient deaths in U.S. hospitals (Zhan & Miller, 2003) serve as the catalyst for health sector wide cultural reform and practice improvement to cultivate safer environments and higher quality care (Melnyk, 2012). Creating an environment and culture where nurses want to practice requires supportive, consistent, and fair leadership. The organizational goal for nursing retention prompted leaders to develop a sense of urgency around the provision of this type of leadership model. The EBL framework was introduced and implemented as a means to cope with this situation. Reducing RN turnover promotes consistency and continuity in the nursing staff and the care provided to consumers.

Implications for Social Change

There is interrelatedness between patient satisfaction, safe quality care, and nurses practicing in environments where they feel supported and are able to practice with a high degree of autonomy. The modern healthcare consumer is educated and has more options than ever before. Patients are capable of quickly viewing and comparing choices and alternatives due to technological advances and can rapidly make decisions. Hospitals must provide an experience that measures up to consumer expectations or risk losing consumers to competitors.

Despite the increasing national contribution to finance health services and the incorporation of advanced technologies, the United States continues to perform poorly in quality outcomes when compared to other industrialized nations (Kavanagh, Cimiotti, Abusalem, & Coty, 2012). As a result, hospital value based purchasing (VBP) is the first approach implemented by the centers for Medicare and Medicaid Services to financially incentivize hospitals to change the way care is delivered (Ryan, 2013). Nurses will be instrumental in meeting the demands of VBP to reduce costs and to create a positive patient experience (Raso, 2013). Incorporating effective processes specific to nursing quality measures will facilitate increased reimbursement with the VBP initiative (Kavanagh, Cimiotti, Abusalem, & Coty, 2012).

Consumer generated calls for social change through increased transparency has made many hospitals uncomfortable. The first step to transparency is the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), a national standardized, publically reported survey of patient perspectives of hospital care (Studer, Robinson, & Cook, 2010). Nursing services contribute to achieving positive HCAHPS scores as the quality of nursing care is directly linked to patient satisfaction (Wolosin, Ayala, & Fulton, 2012). Hospitals are becoming increasingly accountable to consumers, insurers, and the government for transparency in reporting quality outcomes, consumer satisfaction, and the cost for services. As such, stabilizing the nursing workforce is a critical strategy to achieve the transparency mandate and to report the positive organizational outcomes necessary to attract consumers. However, this strategy requires supporting an environment where nurses will chose to practice. A culture conducive to

promoting nursing retention through satisfaction and enjoyment is essential if turnover is to be reduced. The NDNQI annual survey, with focus on the *Job Enjoyment* section, will be instrumental in indicating whether employed nurses intend to remain with the organization.

Definitions

The following definitions include key concepts of ELP and nursing turnover that are associated with this project.

Evidence based leadership: the framework used to reduce variance in leadership skills and processes in order to provide predictable and positive outcomes for the organization and populations served (Alleyne, 2007; Lewis & Caldwell, 2005; Studer, 2010). Groot (2005) posited EBL is the consolidation of key leadership characteristics and competencies form the framework needed to address the threats to patient safety identified by the Institute of Medicine (IOM, 2003). Pfeffer and Sutton (2006) posited evidence-based management, like EBL, requires a distinct mindset and a commitment to require evidence to support any organizational change.

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS): the national, standardized, publically reported survey of patient perspectives of hospital care (Studer, Et al. 2010).

Hourly rounds: an EBL tactic that requires staff to physically enter a patient's room every appropriate hour to assess for pain, position, possessions, and toileting needs.

Leader rounding on staff: an EBL tactic that requires the consistent practice of asking specific questions one-on-one with staff to obtain actionable information and build relationships on an individual level (Studer, 2010).

National data-base for nursing quality indicators (NDNQI): a database of the American Nurses Association. The database collects and evaluates unit-specific nurse-sensitive-data from acute care hospitals. Participating hospitals are able to compare data reports for quality improvement projects such as strategies for nursing turnover. The program allows hospitals to compare measures of nursing turnover against national and state norms for hospitals of the same type down to the unit level.

NDNQI Job Enjoyment: assessment is a portion of the NDNQI RN survey with job satisfaction scales-R.

NDNQI survey: is an annual survey given in October each year to eligible RNs. According to the conditions of participation of the survey to be eligible nurses must be employed full time or part time. They must spend at least 50% of their time in direct patient care and have been employed a minimum of three months on the unit. The survey recipients are selected through by data furnished through the hospitals human resource statistics.

Nurse leader rounding: is an EBL tactic that requires the senior nursing leader on the unit to conduct patient rounds, seeing every patient, every day. This tactic allows the nursing leader to reinforce care, verify nursing behaviors and recognize staff members who go above and beyond (Ketelsen, 2010).

Nursing turnover: is measured by Human Resource Management Services as the annualized number of nurses per 100 who voluntarily or involuntarily leave (terminate) the organization. The purpose of the measure is to track turnover of nurses as one way to quantify the well-being of the hospital's nursing staff.

Assumptions and Limitations

Several assumptions were considered for this project. First, the EBL implementation creates an environment where nurses want to practice thereby reducing their turnover. Secondly, leaders embrace the EBL framework and leader role, holding themselves, as well as staff, accountable to the principles. Perceived clinician support for and understanding of a lifestyle intervention program (Helmink et al., 2012) and continued leadership support during change (Helwe et al., 2011) are demonstrated factors for success or failure. Limitations of the project are primarily stakeholder dependent. Accountability must span from boardroom policy makers to clinicians performing at the patient bedside. No clear definition exists for what accountability means in context of failure to fully implement EBL or comply with the prescriptive behaviors.

The breadth and depth of the project is large which minimizes the amount of control or influence any one person has. The critical component to consider is dependence on end-user buy-in which is the nurse. Hodges and Videto (2011) discussed common barriers that include *turf issues* among groups that think they can outlast any new initiative because of past failed attempts, poor working relationships, and individuals who actively sabotage participation. Davis, Briggs, Arora, Moss, and Schwappach, (2014) concluded that clinician attitude about patient involvement in safety associated

behaviors can be negative if it is believed the nurse-patient relationship could be damaged by the patient alerting others of errors, or potential errors, occurring during their hospital stay. The evaluation will be conducted 6 months after the introduction of EBL to the managers and directors of the organization. This is not a period of time is not of significant length to capture the full influence of EBL on nursing retention but it will provide baseline data for future studies.

Summary

The operational impact of nursing turnover may occur mainly in the financial paradigm but consideration must be given to clinical outcomes and to the responsibility of organizational leadership to embrace the EBL initiative. Importantly, leaders need to understand the critical components and realities of creating an evidence-driven organization and to fully understand that evidence-based practice is no longer optional but is now a fundamental leadership requirement in healthcare settings (Porter-O'Grady & Malloch, 2008).

Section 2: Literature Review

Introduction

The 1999 report from the Institute of Medicine (IOM) estimated that 44,000-98,000 deaths occur each year in U.S. hospitals (Melnyk, 2012). Melnyk (2012) contended that a more recent number is at least 200,000. The leaders of the Seton Family of Hospitals, one of the United States' largest health care networks, are dedicated to preventing equivalent numbers of deaths in their system (Pryor, Hendrich, Henkel, Beckman, & Tersigni 2011). The health care system discussed in this project has since adopted the principles of high-reliability entities. The principles for high reliability organizations (HROs) provide patient safety and excellent quality services by creating a positive culture that promotes processes and encourages people to radically reduce the opportunity for system failures and to effectively respond when failures occur (Melnyk, 2011; Singer & Tucker, 2014).). Evidence-based leadership is a strategy aligning the network goal to promote a positive nursing culture with the principles exhibited by HROs. Creating a positive culture supports the work environment to promote nursing processes and practices to provide evidence-based care and good customer service. This is the best strategy to limit preventable nursing turnover.

Literature Search Strategy

The literature search was conducted electronically using the following databases: Google scholar, Medline, CINAHL, PubMed, and nursing journals. Articles written in the last five years were used as reference. They key search terms used were: CNO (chief nursing officer) scorecards, unit scorecards, Evidence-based leadership, evidence-based

outcomes, nursing leadership and nurses intent to stay, nursing retention, nursing turnover and quality care, nursing work/practice environment, job enjoyment/satisfaction, nurse leader rounding, hourly rounding and heuristics.

Framework

In response to the advancing nursing shortage decision makers prioritized the nursing practice environment and organizational performance as key areas for intervention (Meyer & O'Brien-Pallas, 2010). Evidence-based leadership is the framework used for reducing variance in leadership skills and processes in order to produce a predictable and positive outcome for the organization (Studer, 2010).

The EBL framework can be conceptualized with the leader member exchange theory (LMX). Schyns and Day (2010) posited that the focus of LMX is on the quality and flow of the communication between leaders and followers. Shared exchanges between supervisor and subordinate, from the subordinate's perspective, with a focus on reciprocity can yield a high quality relationship (Schyns & Day, 2014; Walumbwa, Cropanzano, & Goldman, 2011). This type of relationship establishes a commitment between the leader and the staff (Walumba, Cropanzano, & Goldman, 2011) and positively influences organizational outcomes such as employee performance (Walumbwa et al., 2011). In a nonexperimental, predictive survey with a random sample of 600 nurses, Wong and Laschinger, (2012) concluded "the more that nursing leaders are perceived as authentic, by emphasizing transparency, balanced processing, self-awareness, and high ethical standards the more nurses perceive they have access to workplace empowerment structures, are satisfied with their work, and report higher

performance" (p. 947). The EBL framework provides strategies with tools to reduce variance in leadership practices in order to produce predictable outcomes (Scott & Weber, 2008; Studer, 2010) in the same way evidence-based clinical practices are structured to reduce variance and produce predictable positive patient outcomes. The three domains of EBL include: aligned goals, aligned behaviors, and aligned processes.

Managers and directors were introduced to the EBL model and the associated EBL behaviors in April of 2014. Organizational leaders from all levels were responsible for modeling and implementing the EBL strategy in their respective units. Employee compliance was measured on annual evaluations begun in the fiscal year 2016 FY16and was be based on trends in HCAHP score for overall rating of care. For this doctoral proposal the influence of EBL on nursing turnover was evaluated by analyzing a comparison of FY14 and FY15 RN turnover data and the NDNQI nursing survey job enjoyment score results. The network and corporate leaders established a timeline for implementing the EBL model as one year from the date of introduction with a goal of all 10 of the network facilities compliant by April of 2015. The organizational leaders, advised by a leadership consultant, selected *rounding on staff* as the first EBL strategy to be introduced to managers and staff, followed by *hourly rounding*, and *nurse leader rounding*.

Rounding on staff consists of unit leaders conducting monthly five minute meetings with each staff member reporting to that leader. Baker and McGowan (2010) credited rounding on staff as the single most important tactic in reducing nursing turnover. Rounding discussions enhance communication, raise employee satisfaction,

and have a positive influence on nursing retention (Hinson & Spatz, 2011). For example, Children's Hospital of Philadelphia was able to reduce voluntary turnover by 91% after initiating a retention collaborative which included rounding on staff (Hinson & Spatz, 2011). The meeting is scripted, takes less than five minutes, and establishes a relationship between the employee and leader. The meeting provides the leader with an opportunity to address employee concerns and provides the leader with the opportunity to reward and recognize individuals for their work. Rounding on staff is a platform for identifying poorly performing systems and processes and promotes professional development conversations with employees (Crouch, Ketelsen, & Baker, 2010).

Hourly rounding is the EBL second strategy, introduced to the leadership group in June of 2014. Hourly rounding is the act of clinical staff conducting hourly patient rounds on each patient in the unit. The purpose of the round is to reduce the opportunity for a patient to fall by assessing the patient environment for proximity of personal possessions, the need for toileting, level of pain, and the need for repositioning. Toileting needs of hospitalized patients can increase the risk for falls. Harrington et al. (2013) described hourly rounding as a process for putting the patient at the center of care. Harrington et al. (2013) found a decrease in call bell use, an improvement in patient safety and promoted patient and staff satisfaction with care. Olrich, Kalman, and Nigolian (2012) conducted a quasi-experimental study on the benefit of hourly rounding and concluded with hourly rounding resulted in reduction of falls, decrease call light use, and increased patient satisfaction.

The third and final strategy to be included in the evaluation period of EBL and the influence on nursing retention is nurse leader rounding on patients. Nurse leader rounding requires the senior nursing leader to conduct daily patient rounds on all patients in the leader's unit. Ketelsen (2010) found that the strategy allows the nursing leader to connect with patients, reinforce care, verify nursing behaviors, and recognize staff members who demonstrate best practice behaviors. Recognizing and rewarding staff for exemplary work is an ideal way to promote retention by recognizing the value staff brings to the organization. To avoid taking people and performance for granted an individual must practice consistent, fair, and sincere reward and recognition (Charles & Cook, 2010). Kennedy, Craig, Wetsel, Reimels, and Wright, (2013) found that HCAHPS *overall quality of care* scores dropped during the implementation phase of nurse leader rounding however, a sustained increase in scores soon followed. Tan and Lang (2014) described nurse leader rounding as an effective method for ensuring that expected patient outcomes are being achieved but concluded the tactic is most successful if coupled with post-discharge phone calls. Discharge phone calls are not a new practice for the organization and will not be considered for evaluation of EBL.

Practice Environment

The effort to minimize turnover across an organization is daunting when leaders are unfamiliar with the characteristics of an excellent nursing culture. Creating a practice environment where nurses are supported by transformational leaders has been shown to have a positive influence on a nurse's intent to stay in their current position (Cowan, Cummings, & McGrath, 2011). Grant, Colello, Riehle and Dende (2010) concluded that

it requires reclaiming the humane and holistic characteristics that embody the art of nursing before a culture and environment can be created that compels nurses to stay. Kooker and Kamikawa (2010) determined improving nursing retention had a significant financial benefit for the organization. Barden, Griffin, Donahue, and Fitzpatrick (2011) agreed that empowering registered nurses through shared governance is a key driver in improvement of quality patient care, cost containment and retention of registered nurses.

A common reason nurses give for leaving a position is the relationship, or psychological contract, they have with their immediate supervisor (Rousseau, 1990). Gormley (2010) suggested the reason for nursing turnover is the difference in perception, between the staff nurse and manager, regarding the practice environment. In a literature review focused on the influence of nursing leadership on nursing performance, Germaine and Cummings (2010) found nursing performance is improved with increased nursing autonomy, positive work relationships, resource availability, and supportive leadership practices. Furthermore, nursing leadership needs to be transparent, possess high ethical standards, and have a heightened sense of self-awareness (Wong & Laschinger, 2013). When nurses perceive they have more opportunities, are satisfied with their work environment, and report higher engagement, they will perform better.

The literature search revealed a common theme on the perception of the ideal nursing work environment. Leadership is the primary influence on both retention and turnover. Additional influences on nursing turnover/retention include autonomy of practice, supportive relationships with nursing leaders, and the tools and resources to do their jobs.

Nursing Turnover Cost and Quality Care

The economic constraints linked to organizational efficiency agendas, including reductions in nursing staff, are partially responsible for nursing turnover (Barden, Griffin, Donahue, & Fitzpatrick, 2011), and the insufficient supply of new nurses entering the work force (Fox & Abrahamson, 2009). As such, the organizational plan for sustainability focused on addressing nursing turnover. The plan set the goal to create an environment where nurses want to practice and patients want to seek health services. This goal was a driving force behind the implementation of EBL.

Additional consideration must be given to turnover cost. Organizations must have methods in place to measure costs associated with nursing turnover. North et al. (2013) discussed a method for measuring costs by calculating half of an annual salary, plus the additional cost of backfilling the position. Barden, Griffin, Donahue and Fitzpatrick, (2011) placed partial responsibility of nursing turnover on economic constraints and the need for organizations to cut costs by downsizing the professional workforce. Using Kooker and Kamikawa's (2010) updated nursing turnover cost calculation methodology, the true cost of nursing turnover can be calculated at 1:2 or1:3 times the annual salary. Applying Kooker and Kamikawi's (2010) methodology to a median annual salary of $50,000 (x3) suggests turnover costs could exceed 9 million dollars if all 64.5 FTEs were to be back-filled.

Organizational concern regarding nursing turnover exceeds financial implications and leaders understand quality and safety are affected. For example, a cross-sectional secondary data analysis, Trinkoff et al. (2011) found problems with nurse staffing, job

demands, work environment, and scheduling resulted in significant increases in pneumonia deaths and postoperative pulmonary emboli. Similarly, Park et al. (2014) reported a high nursing turnover rate results in negative patient outcomes, such as pressure ulcers and falls. Extended hospital stays resulting from nursing turnover add to the financial burden organizations encounter. Organizations then begin a cycle involving turnover and cost.

Summary and Conclusions

The organizational goal is to create an environment where nurses want to practice and patients want to have their health care needs met. Stemming the flow of nursing turnover is a critical component of the organizational plan for achieving the goal. The EBL framework is the overarching method selected to provide the tools and support for nurses to meet the healthcare needs of the consumer. The four threats to patient safety identified by the IOM include poor management practices, unsafe workplace environment, unsafe allocation of work, and punitive organizational cultures (Groot, 2005). Groot stated the IOM report had four strategies against these threats with transformational leadership and evidence-based management practices at the forefront. This EBL framework is the mechanism for providing an environment that is clinically conducive to nursing retention.

Section 3: Methodology

Introduction

Nursing turnover has serious implications including negative patient outcomes, poor staff and physician satisfaction, and decreased financial sustainability of the organization. To address nursing turnover, the CEO of the Seton organization presented the EBL model at a mandatory meeting held at the corporate office on April 1, 2014. The CEO, with support from the leadership consultant, outlined clear expectations regarding the systematic introduction of EBL across the health system. There was to be no variation between units in the process of EBL implementation. The timeline for organizational implementation of EBL was included at the introductory meeting and provided to each leader in a written format. The CEO's expectation for strict adherence to the process was messaged clearly to leaders. The purpose of the project was to evaluate the system-wide implementation of the EBL framework and the correlation to nursing turnover.

The Setting

The project was Seton Medical Center Austin (SMCA) in Austin, Texas. In January of 2014, Seton family of hospitals partnered with leadership consultants with experience in EBL coaching. The consulting firm sent a coach to central Texas to provide a methodical and systematic plan for the immersion of all 10 Seton facilities. The plan calls for the incremental rollout of the components of the proprietary EBL framework beginning with associate rounding in April 2014 and continuing until all the components are formally implemented. The expected time frame for total immersion of all 10 hospitals is one year. SMCA was selected as the project site because it was a major

leader in central Texas healthcare and it suffered a significant nursing turnover percentage during the aftermath of the intentional reduction in force. The chief nursing officer is cautiously hopeful that EBL can restore balance, trust and morale on nursing units that are skeptical of the plan (D. Hernandez, personal communication, April 28, 2014).

Evidence-Based Leadership and the Evaluation Plan

The organizational plan called for the initial introduction of EBL in April of 2014. The strategies were introduced and implemented over the course of the following year. The three tactics directly impact nursing practice: hourly rounding, nurse leader rounding on patients, and nurse leader rounding on staff, were in place for seven months at the time of the program evaluation.

The first tactic, rounding on staff, was introduced in April of 2014. This process directs each unit manager or director to conduct a monthly or bimonthly five minute meeting with each staff member. The meeting frequency is determined by the number of staff with units employing greater than 40 staff members utilizing an every other month schedule. The private face to face meetings provide managers the opportunity to ask a series of focused questions regarding the employee's work life and environment. The purpose is to a professional working relationship with the employee and to evaluate their job satisfaction level. Also, the employee has the opportunity to ask questions or voice concerns directly to their manager.

The second hourly rounding strategy, focused on patients was initiated out in June of 2014. The strategy requires the nurse to check each patients hourly during the day and

every two hours during the night to assess for pain, potty, possessions, and positions, the 4Ps.

Nurse leader rounding on patients was introduced into practice in April. The senior nursing leader on each unit is required to conduct patient rounds on their unit each morning and connect with hospitalized patients to assess the quality of care. The strategy allows the manager to immediately address complaints and concerns as well as to identify gaps in care. Importantly, the nursing leader can give immediate recognition to staff that go above and beyond their basic nursing responsibilities to meet the needs of the patient.

Sample

Aggregate data from RNs on 10 clinical units were used in the evaluation of EBL on nursing turnover. There were 820 RNs, eligible to take the October 2014 NDNQI RN survey, employed in 10 clinical units within the practicum site. The 10 clinical units evaluated for turnover data were SMCA 3 step down unit, SMCA 4, SMCA 5, SMCA 6, 7N medical, mother/baby, ICU, IMC, NICU, and labor and delivery.

Eligibility criteria include RNs employed full time, part time, and PRN. Agency and contract RNs were not eligible.

Variables

The independent variable was EBL. The dependent variables are RN turnover and job enjoyment. The Human Resource Department's operational definition of turnover is the annualized number of nurses per 100 who voluntarily or involuntarily leave the organization.

Instruments

Unit specific dashboards were utilized for unit specific turnover metrics related to the project. The RN turnover data is measured in percentages includes the trending direction from the previous quarter and the desired target. The turnover data for nurses leaving the organization is entered by unit management into *PeopleSoft, a* computer system used to track all aspects of human capital. The analytic specialists compile the data and build the unit specific scorecard.

The NDNQI annual survey will also serve as the instrument for data collection regarding the job enjoyment scores. The NDNQI RN survey with job satisfaction scales-R contains Job Enjoyment work context items. The survey has Likert-like questions that measure job satisfaction at the unit level. The survey is administered annually in October and the results available by the following November.

Data Collection

The RN turnover percentages reported in the third quarter of FY14 were used for the baseline data and evaluated against the second quarter report from FY15. Turnover percentages are determined by using Human Resource data of associates who change employment status by transferring, promotion or termination off their unit.

Turnover data is collected by managers and directors for each RN that is transferred, terminates or resigns a position. When an individual leaves the organization policy requires unit management to conduct an exit interview to determine the reason why the nurse is leaving. This information is captured and entered into a computer software program. The analytics team is then responsible for compiling the information

and disseminating to hospital leaders in various report forms. The turnover percentages
are analyzed for improvement or failure to improve. The time periods used for the
evaluation are pre and post EBL which begin with the pre EBL period for calendar year
November 2013 and the post EBL reporting period of calendar year November 2014.
The unit scorecards will be used for the evaluation of EBL and its influence on RN
turnover at SMCA. Statistical analysis will be conducted to identify statistical
significance of the turnover metrics and job enjoyment.

Data Analysis

The data analysis took into consideration the total number of RNs employed
during the third quarter of FY14 on the 10 identified hospital units and evaluated against
the total number of RNs employed in the identified units at the end of the second quarter
of FY 15. Turnover data was compiled from the unit specific scorecards. A t test was
used to analyze nursing turnover data. Aggregate data from the NDNQI survey job
enjoyment score was used to assess employed RNs intent to stay with the organization
and evaluated against the previous year's results using a t-test for statistical analysis.
Hypothesis testing was used to determine:

H_0: EBL has no influence on nursing turnover

H_1: EBL has influence on nursing turnover

The risk of committing an error was controlled through determining the level of
significance 0.1.

Protection of Human Rights

Aggregate data was used with no identifiers available. No private data was used for the evaluation process.

Summary

Reducing nursing turnover is a nursing quality benchmark impacting the dimensions of finance, safety, and, nursing and patient satisfaction. Benchmarking against other hospitals is an important element in achieving best practice and the highest level of quality patient care (Rees & Leahy-Gross, 2012). Reducing RN turnover in FY15 is a challenging endeavor with competitors offering higher wages and attractive sign-on bonuses but data supports factors other than money have influence on nurses' intent to leave current employment.

This section of the proposal has focused on the strategies of the EBL framework, implementation plan and evaluation method used to assess influence of EBL as it pertains to RN nursing turnover.

Section 4: Findings, Discussion, and Implications

Introduction

An analysis was conducted to examine the EBL bundle relationship to the nursing turnover, using turnover data from two time points. The project hypotheses were:

1. After the implementation of EBL there will be a reduction in nursing turnover.

2. After the implementation of EBL there will be an increase in job satisfaction scores.

The turnover data from third quarter of the fiscal year 2014 was used as the baseline as this period was immediately prior to the introduction and implementation of the initial bundle in the EBL process. This bundle included hourly rounding, nurse leader rounding and leader rounding on staff. The second quarter of FY 15 turnover data was the second time point seven months after the implementation of the initial EBL bundle. Turnover data was gathered using the unit specific dashboards of the 10 clinical units identified for the evaluation.

Turnover Data

A standard t-test was performed to test the null hypothesis that EBL bundle has no influence on nursing turnover. The data was normally distributed permitting the t-test for data analysis. A one tailed t-test was performed on the two data sets, representing the turnover percentages from the time points of FY 14 and FY 15. The p-value for the one tailed t-test was 0.358. The t-test showed no difference in the early and late data thus I cannot reject the null hypothesis, or *After the implementation of Evidence-Based Leadership there will be less nursing turnover*. A summary of the data is presented in table 1.

Table 1

Comparison of RN Turnover Data on Ten Clinical Units at SMCA

SMCA	FY 14	FY 15	*t*	*df*	*p*
3rd tele	1.17%	.97%	0.375	9	0.358
5th MS	1.34%	1.38%			
7N Oncology	1.69%	2.15%			
4N Pulmonary	1.16%	1.50%			
6th Ortho	.74%	.97%			
ICU	.97%	0.00%			
IMC	.92%	0.65%			
MB	.93%	.97%			
L&D	1.60%	2.34%			
NICU	1.57%	.47%			

Job Enjoyment Data

The NDNQI survey question assessing job enjoyment was the data point selected to indicate potential turnover.   The NDNQI® *RN Survey with Job Satisfaction Scales-R* contains selected items from the *NDNQI-Adapted Index of Work Satisfaction* (Stamps, 1997; Taunton et al., 2004), and N*DNQI-Adapted Nursing Work Index* (Aiken & Patrician, 2000). It also contains *Job Enjoyment* (adapted from Brayfield and Rothe, 1951; Taunton et al.), work context items, and nurse characteristic items. Job enjoyment is measured by a Likert like scale with response options of "strongly agree, agree, tend to agree, tend to disagree, disagree, and strongly disagree". The job enjoyment scale questions: *Nurses with whom I work would say that they:*

1.   Are fairly well satisfied with their jobs.

2.   Would not consider taking another job.

3. Have to force themselves to come to work much of the time.

4. Are enthusiastic about their work almost every day.

5. Like their jobs better than the average worker does.

6. Feel that each day on their job will never end.

7. Find real enjoyment in their work.

A standard t-test was performed to test the null hypothesis that Evidence-Based Leadership has no influence on nursing job enjoyment. The data was normally distributed permitting the t-test for data analysis. A one tailed t-test was performed on the two data sets, representing the job enjoyment survey results from October of calendar year 2013 and the comparison time point and survey result for calendar year 2014. The p-value for the t-test on the job enjoyment data was 0.168 which eliminated rejecting the null hypothesis of *After the implementation of Evidence –Based Leadership there will be higher job satisfaction as measured by the NDNQI job enjoyment indicators.* A summary of the data in included in table 2.

Table 2.
Comparison of RN Job Enjoyment Indicators, From the 2013 and 2014 NDNQI Survey on 10 Clinical Units at SMCA.

SMCA	FY 14	FY 15	*t*	*df*	*p*
3rd tele	48.8	49.42	-1.018	9	0.168
5th MS	56.62	46.17			
7N Oncology	44.1	51.92			
4N Pulmonary	53.88	53.9			
6th Ortho	48.57	50.16			
ICU	37.54	34.09			
IMC	44.53	49.47			
MB	43.88	46.37			
L&D	30.11	41.63			
NICU	53.04	57.42			

Discussion

The purpose of the project was to evaluate the implementation of Evidence-based Leadership at a tertiary medical center in central Texas and its impact on nursing turnover. The evaluation was based on three behaviors bundled for the first phase of EBL exposure at the medical center. Turnover data was examined for the time period immediately prior to the introduction of the EBL behaviors, hourly rounding, nurse leader rounding and leader rounding on staff, and at seven months post-implementation. The job enjoyment data was also examined at two time points. The job enjoyment scores from the 2013 NDNQI survey were obtained prior to the introduction of EBL and the 2014 NDNQI survey was taken seven months after implementation. The findings showed no statistically significant improvement in turnover or job enjoyment after the implementation of nurse leader rounding, hourly rounding and leader rounding on staff.

This study may be more relevant in providing a baseline for future studies on EBL and nursing turnover than reflective of the significance of the first bundle of behaviors on turnover. The implementation of the remaining behavior bundles that make up the EBL framework may significantly influence turnover in a way the single bundle was unable to demonstrate. Bundled approaches to problem solving are not new. Sepsis bundles consist of combining component therapies and have been proven in improving patient outcomes (Barochia, et al., 2012). Aboelela, Stone, and Larson (2007) posited that care bundling has been recognized and recommended by the Institute for Healthcare Improvement but they also determined that bundled behavioral interventions were effective in controlling healthcare-associated infections. The lack of significant improvement in turnover may be attributed to the implementation of only a portion of the EBL framework and may change when implemented in its entirety.

The implementation of the first bundle of EBL was made a mandatory expectation by organizational leaders. Organizational leadership attended a two day workshop at which the EBL framework was laid out with timelines and clear expectations of implementation. Hourly rounding, nurse leader rounding and leader rounding on staff scenarios were presented via video demonstrations to the group. Return demonstrations of each of the behaviors were then performed by the manager and directors at which time competency check offs were performed by the EBL coaches and consultants. It was expected these behaviors would be incorporated into daily practice by all leaders and managers as appropriate. However, the size of the organization and variance in leadership commitment made assessment of total implementation difficult at

best. Direct observation of EBL behaviors on each of the 10 units might be effective in assessing the stage and degree of behavior implementation.

Boyle and Miller (2008) likened nursing turnover to a two-sided coin where you can have an infusion of new ideas as a result of turnover on the one side however the risk to patient care and cost to the organization are strong indicators for addressing turnover.

Strengths, Limitations, and Implications

System wide implementation of Evidence-Based Leadership was an expensive endeavor for the organization. One of the hospitals in the organization had implemented the EBL bundles approximately nine years prior to the entire organizational implementation of EBL. The pioneer hospital had the top HCAHP scores in the organization and the lowest turnover rates so financially it made sense for the organization to pursue full implementation of EBL. The practicum site ranked at the lower end of the HCAHP scores and had ranked high in the organization for turnover. The 10 clinical units selected for the evaluation of EBL on nursing turnover provided a sample size large enough to evaluate the statistical significance of EBL on nursing turnover.

There were numerous limitations to consider in the evaluation process of this project. The quantitative design used did not allow for gathering nursing stories concerning the reasons they leave employment or what they deem as ideal working conditions however, according to Terry (2012) the quantitative design does allow the investigator to establish "correlation and causal relationships between variables" (p.68).

There was sparse literature relevant to empirically support the use of EBL as a strategy to reduce nursing turnover. The hospital managers and clinical unit directors were educated in a concise, methodical manner by the same educator. This education took place at the same point in time but it is unknown how the managers and directors educated the staff on the EBL bundle used for this evaluation. However, there was no way to account for the variance in the method, consistency, content and timing of the staff education. The method of EBL accountability, or lack of, used to monitor hourly rounding, nurse leader rounding, and leader rounding on staff at the unit level was not defined by the organization. The clinical unit was the natural setting used in the evaluation of the project and natural settings are uncontrolled, real-life settings (Grove, Burns, & Gray, 2013). This study may provide support to decrease the gap in current literature regarding the effect of EBL on nursing turnover.

Recommendations for Future Work

Program evaluations are a proven method of validating the existence of a relationship, or lack of, between the program and a desired outcome. This evaluation failed to find statistically significant support validating EBL influence on nursing turnover and job satisfaction at Seton Medical Center Austin. Additional research is needed after all the EBL bundles are implemented in the clinical units. It is projected that implementation of the entire EBL process will take approximately 24 months to complete. Each phase will deploy bundled behaviors that are to be incorporated into daily activities of the leaders and associates of the organization. The next bundle to be introduced will consist of pay for performance evaluations, Leader Evaluation Metrics

and incorporation of the monthly meeting model. Because the full implementation of the EBL process will occur over an extended period of time additional research using a longitudinal design should be considered. Longitudinal designs examine changes in the same subjects over time (Grove, Burns, & Gray 2013) and require the researcher to ask the same questions (Terry, 2012).

The project boils down to the evaluation of human behavior. The staff is educated on the desired behaviors and it is believed, by organizational leaders, they understand why and how the behaviors will influence patient care, nursing turnover, and leader accountability. Communication is elusive and one often finds that what is said is not what is heard. Ten randomly selected Nurses in an ICU were video recorded for frequency, success and quality of their communication when interacting with nonspeaking patients with patients ranking 40% of the communication sessions as difficult or extremely difficult (Happ et al., 2011). Sayre, McNeese, Leach and Phillips (2012) found that nurses prefer the behavior of avoidance rather than utilizing the tools and skills given to them in an educational intervention to improve patient safety. Further research is needed to understand why some behaviors are successfully implemented and others are not.

Analysis of Self

The DNP degree will provide the framework for the launch of the final phase of my professional career and will assist in leaving a legacy of knowledge that will benefit future nurses. The DNP program in its entirety has broadened my sense of what nursing and health mean and allowed me to see issues in a global view. Thinking of disparities as a global problem is a paradigm shift as I can now see I had a narrow view of nursing and basically the world. The DNP experience has allowed me to become a multi-dimensional leader able to look at issues from a multitude of sides.

The importance of mentoring new nurses took on urgency when the realization set in that I need to select and train my replacement to carry on the work after I am gone. I am most grateful for the leadership skills I acquires through the practicum experience as well as the many phenomenal leaders I have networked with. Turning my focus to a humanitarian approach to all things was a changing point that affected all aspects of my behavior. Continual thought on what is right for the greater good is a lesson learned through the DNP process and will be invaluable in all aspects of my life. Another valuable pearl gained through this experience came from Zaccagnini and White (2012) when they discussed a trait a good leader possesses is knowing when to speak and when not to. I will continue with research around evidence-based leadership and its effect on nursing turnover and will remain forever grateful for the DNP experience.

Summary

Introducing EBL as a model supported by a heuristic framework consisting of behavior bundles to be implemented at strategic time points for the reduction of nursing turnover is a groundbreaking and new way of thinking about leadership. Each component of the EBL strategy is supported by research, post- priori, but the whole was lacking the support needed to truly call the leadership model *evidence based.* This process and project has provided the missing components and has provided a good baseline for a longitudinal study on EBL and nursing turnover.

The 2010 Institute of Medicine (IOM) report, *The Future of Nursing: Leading Change, Advancing Health,* redefines the field of nursing and states "nurses should be full partners in healthcare reform" (Hassmiller & Reinhard 2015 p. 49). Creating practice environments conducive to optimal nursing retention is critical in realization of true healthcare reform. Full implementation of the EBL strategies and behavior bundles has the potential to create the type of environment where nurses feel empowered to make decisions and the autonomy to practice at the top of their licensure.

This study followed Avedis Donabedian's advice as illustrated in the simple Quality Model: Structures + Processes= Outcomes, to implement improvement and then to measure the outcomes. Further research is needed to fully establish statistical significance of the EBL strategies on nursing turnover however; by developing the heuristic framework in this study, consultants and leaders are moved from unstructured rationalizing "it just makes sense" to structured questions measuring "did it work". With large expenditures on leadership coaching and management programs, health leaders

need to understand whether or not the large expenditures produced meaningful, and more

importantly, measurable improvements.

Chapter 5: Scholarly Product

Reduction of nursing turnover is critical for the sustainability of organizations and the practice of safe patient care. Creating an environment where nurses what to practice is a key strategy in the reduction of turnover and leadership has a significant role in the creation of that environment (Weberg, 2010). Evidence-Based Leadership (EBL) is a strategy whereby leadership behaviors are bundled together to produce an environment that aligns goals, reduces variability in leadership behavior and practice and creates an environment where nurses want to practice (Studer, 2010, Cowden, Cummings, & Profetto- McGrath, 2011). Therefore, it is imperative for organizations to embrace the strategies and tactics to transform leadership behaviors to create the type of environment that nurtures nursing and nursing practice.

Background

Nursing turnover is an expensive organizational outcome. Controlling turnover is a top organizational priority considered essential for sustainability. The parent organization recently restructured the organizational chart and reporting structure of all 10 hospitals in the local ministry. The restructure resulted in a reduction in force (RIF), which served as an unexpected catalyst for many nurses to voluntarily terminate employment. The hospital nursing turnover was 15.2% or 64.5 full time equivalents (FTEs) in the second quarter of FY 14 and increases to 18.9% or 120.8 FTEs in the next quarter. In an attempt to stabilize the rapid departure of nurses, the organization urgently initiated a search for intervention strategies. This search resulted in a call to action for the implementation of the Evidence-Based Leadership Model.

Literature Review

Evidence-Based Leadership (EBL) is a strategy that aligns with the network goal of stabilizing the nursing culture, a necessary step in becoming a high reliability organization. The three behaviors that make up the initial EBL bundle include nurse leader rounding, hourly rounding, and leader rounding on staff. There is a large amount of literature to support each individual behavior but little exists in regards to the strategy of EBL as a framework for bundling behaviors to produce desired outcomes.

Rounding on staff consists of unit leaders conducting monthly five minute meetings with each staff member reporting to that leader. Baker and McGowan (2010) credit rounding on staff as the single most important tactic in retaining nurses. Rounding discussions enhance communication, raise employee satisfaction, and have a positive influence on nursing retention (Hinson & Spatz, 2011).

Hourly rounding is the act of clinical staff conducting hourly patient rounds on each patient in the unit. The purpose of the round is to reduce the opportunity for a patient to fall by assessing the patient environment for proximity of personal possessions, the need for toileting, level of pain, and the need for repositioning. Toileting needs of hospitalized patients can increase the risk for falls. Harrington et al. (2013) describes hourly rounding as a process for putting the patient at the center of care. Outcomes of the Harrington (2013) study revealed a decrease in call bell use, an improvement in patient safety and promoted patient and staff satisfaction with care. Olrich, Kalman, and Nigolian (2012) conducted a quasi-experimental study on the benefit of hourly rounding

and concluded with hourly rounding resulted in reduction of falls, decrease call light use, and increased patient satisfaction.

Nurse leader rounding requires the senior nursing leader to conduct daily patient rounds on all patients on his/her unit. Ketelsen (2010) explains this tactic allows the nursing leader to connect with patients, reinforce care, verify nursing behaviors, and recognize staff members who demonstrate best practice behaviors. Recognizing and rewarding staff for exemplary work is an ideal way to promote retention by recognizing the value staff brings to the organization. To avoid taking people and performance for granted one must practice consistent, fair, and sincere reward and recognition (Charles & Cook, 2010). Kennedy et al. (2013) found that HCAHPS "overall quality of care" scores dropped during the implementation phase of nurse leader rounding however, a sustained increase in scores soon followed. Tan and Lang (2014) describe nurse leader rounding as an effective method for ensuring that expected patient outcomes are being achieved but concluded the tactic is most successful if coupled with post-discharge phone calls.

Methodology

The project took place at Seton Medical Center in Austin, Texas. Ten clinical units were selected for the evaluation of the implementation of EBL and its influence on nursing turnover and nursing job satisfaction. In April of 2014, Studer Group, a healthcare consulting firm and the creators of the EBL framework, conducted a system wide introduction and immersion of organizational leadership. The intensive education consisted of the principles, strategies and behaviors that constitute the EBL framework. The first behavior bundle for organizational implementation consisted of hourly

rounding, nurse leader rounding and leader rounding on staff. The 10 clinical units being evaluated for turnover data and job satisfaction are SMCA 3 step down unit, SMCA 4, SMCA 5, SMCA 6, 7N medical, mother/baby, ICU, IMC, NICU and labor and delivery. These units were selected because of the high nursing turnover.

Implementation of Evidence-Based Leadership

The implementation consisted of organizational leaders partnering with the consulting coaches and conducting unit education. The manager or leader of the nursing units were responsible for the educational design process with the end result being written validation of the correct performance of nurse leader rounding, hourly rounding, and leader rounding on staff. The consulting firm provided video vignettes demonstrating the proper way to conduct the behaviors as well as techniques for coaching when improvement was needed. Competency validation forms were to be placed in each associate's education file when complete.

Sample

Aggregate data from RNs on 10 clinical units was used in the evaluation of EBL on nursing turnover. There were 820 RNs, eligible to take the October 2014 NDNQI RN survey, employed in 10 clinical units within the practicum site. The 10 clinical units evaluated for turnover data and job enjoyment were SMCA 3 step down unit, SMCA 4, SMCA 5, SMCA 6, 7N medical, mother/baby, ICU, IMC, NICU and labor and delivery.

Eligibility criteria include RNs employed full time, part time and PRN. Agency and contract RNs were not eligible.

Instrument

Unit specific dashboards were utilized for unit specific turnover metrics related to the 10 units being evaluated. The RN turnover data was measured in percentages and included the trending direction from the previous quarter and the desired target.   The turnover data was entered into the *PeopleSoft* computer system where the analytic specialists then compiled the data and reported out in the form of the unit specific scorecard.

The NDNQI annual survey also served as the instrument for data collection regarding the job enjoyment scores. The NDNQI RN survey with job satisfaction scales-R contains Job Enjoyment work context items. The survey has Likert-like questions that measure job satisfaction at the unit level. The survey is administered annually in October and the results available by the following November.

Data Collection

The project began with the baseline turnover data from the quarter prior to the EBL implementation in April 2014. The job enjoyment scores from the October 2013 NDNQI nursing survey also provided baseline data for the evaluation. The post-implementation time point was seven months after the implementation date. Turnover data from the second quarter of FY 15 was analyzed against the baseline data to determine if EBL improves nursing turnover. The NDNQI job enjoyment scores from the October 2015 survey was also used to compare the previous year's results to determine if EBL improves job enjoyment. Job enjoyment is measured by a Likert like

scale with response options of "strongly agree, agree, tend to agree, tend to disagree, disagree, and strongly disagree". The job enjoyment scale questions: *Nurses with whom I work would say that they:*

1. Are fairly well satisfied with their jobs.

2. Would not consider taking another job.

3. Have to force themselves to come to work much of the time.

4. Are enthusiastic about their work almost every day.

5. Like their jobs better than the average worker does.

6. Feel that each day on their job will never end.

Data Analysis

Data analysis took into consideration the total number of RNs employed during the third quarter of FY14 on the 10 identified hospital units and evaluated against the total number of RNs employed in the identified units at the end of the second quarter of FY 15. Turnover data was compiled from the unit specific scorecards. A t-test was the statistical test used to analyze the data on nursing turnover. A t-test was used to analyze the difference between the two samples (Polit, 2010). Aggregate data from the NDNQI survey job enjoyment score was used to assess employed RNs intent to stay with the organization and evaluated against the previous year's results using a t-test for statistical analysis. Hypothesis testing will determine:

Ho: EBL has no influence on nursing turnover

*H*1: EBL has influence on nursing turnover

Findings

Turnover Data

A standard *t* test was performed to test the null hypothesis that EBL has no influence on nursing turnover. Data was determined to have normal distribution so a t-test was chosen for data analysis. A one tailed t-test was performed on the two data sets, representing the turnover percentages from the time points of FY 14 and FY 15. The p-value for the one tailed t-test was 0.358. The t-test showed no difference in the early and late data thus I cannot reject the null hypothesis, *After the implementation of Evidence-Based Leadership there will be less nursing turnover*. A summary of the data is presented in table 1.

Table 1.
Comparison of RN turnover data on 10 clinical units at SMCA

SMCA	FY 14	FY 15	*t*	*df*	*p*
3rd tele	1.17%	.97%	0.375	9	0.358
5th MS	1.34%	1.38%			
7N Oncology	1.69%	2.15%			
4N Pulmonary	1.16%	1.50%			
6th Ortho	.74%	.97%			
ICU	.97%	0.00%			
IMC	.92%	0.65%			
MB	.93%	.97%			
L&D	1.60%	2.34%			
NICU	1.57%	.47%			

Job Enjoyment Data

A standard *t* test was performed to test the null hypothesis that Evidence-Based Leadership has no influence on nursing job enjoyment. Data was determined to have

normal distribution so the *t* test was chosen for data analysis. A one tailed *t* test was

performed on the two data sets, representing the job enjoyment survey results from

October of calendar year 2013 and the comparison time point and survey result for

calendar year 2014. The p-value for the t-test on the job enjoyment data was 0.168 which

eliminated rejecting the null hypothesis, *After the implementation of Evidence –Based*

Leadership there will be higher job satisfaction as measured by the NDNQI job

enjoyment indicators. A summary of the data in included in table 2.

Table 2.
*Comparison of RN job enjoyment indicators, from the 2013 and 2014 NDNQI survey on
10 clinical units at SMCA.*

SMCA	FY 14	FY 15	*t*	*df*	*p*
3rd tele	48.8	49.42	-1.018	9	0.168
5th MS	56.62	46.17			
7N Oncology	44.1	51.92			
4N Pulmonary	53.88	53.9			
6th Ortho	48.57	50.16			
ICU	37.54	34.09			
IMC	44.53	49.47			
MB	43.88	46.37			
L&D	30.11	41.63			
NICU	53.04	57.42			

Discussion

The purpose of this project was to evaluate the influence of Evidence-Based

Leadership (EBL) on nursing turnover and job enjoyment on 10 clinical units at Seton

Medical Center in Austin Texas. The evaluation was based on three behaviors bundled

for the first phase of EBL exposure at the medical center. The three behaviors were

hourly rounding, nurse leader rounding and leader rounding on staff. The turnover and

job enjoyment data was examined at two time points. The turnover baseline data was obtained from the quarter prior to the April, 2014 EBL implementation. The NDNQI nursing survey job enjoyment scores from 2013 and 2014 were the two time points used for the job enjoyment evaluation. The two time points allowed for seven months of EBL exposure on the clinical units. The findings showed no statistically significant improvement in nursing turnover or job enjoyment scores.

This study may be more relevant in providing a baseline for future studies on EBL and nursing turnover than reflective of the significance of the first bundle of behaviors on turnover. The implementation of the remaining behavior bundles that make up the EBL framework may significantly influence turnover in a way the single bundle was unable to. Bundled approaches to problem solving are not new. Sepsis bundles consist of combining component therapies and have been proven in improving patient outcomes (Barochia, et al., 2012). Aboelela, Stone, and Larson (2007) posited that care bundling has been recognized and recommended by the Institute for Healthcare Improvement but they also determined that bundled behavioral interventions were effective in controlling healthcare-associated infections. The lack of significant improvement in turnover may be attributed to the implementation of only a portion of the EBL framework and may change when implemented in its entirety.

Strengths, Limitations and Implications

The clinical units provided a large enough sample size to provide significant data. There were numerous limitations to consider in the evaluation process of this project. The quantitative design used did not allow for gathering nursing stories

concerning the reasons they leave employment or what they deem as ideal working

conditions however, according to Terry (2012) the quantitative design does allow the

investigator to establish "correlation and causal relationships between variables" (p.68).

There sparse literature relevant to empirical support for EBL as a strategy to reduce

nursing turnover. The managers and directors of the hospital's clinical units were

educated in a concise, methodical manner by the same educator. This education took

place at the same point in time but it is unknown how the managers and directors

educated the staff on the EBL bundle used for this evaluation. However, there was no

way to account for the variance in the method, consistency, content and timing of staff

education. The method of EBL accountability, or lack of, used to monitor hourly

rounding, nurse leader rounding, and rounding on staff at the unit level was not defined

by the organization. The clinical unit was the natural setting used in the evaluation of the

project and natural settings are uncontrolled, real-life settings (Grove, Burns, & Gray,

2013). This study may provide support to decrease the gap in current literature regarding

the effect of EBL on nursing turnover.

Recommendations for Future Work

Program evaluations are a proven method of validating the existence of a

relationship, or lack of, between the program and a desired outcome. This evaluation

failed to find statistically significant support validating EBL influence on nursing

turnover and job satisfaction at Seton Medical Center Austin. Additional research is

needed after all the EBL bundles are implemented in the clinical units. It is projected that

implementation of the entire EBL process will take approximately 24 months to

complete. Each phase will deploy bundled behaviors that are to be incorporated into daily activities of the leaders and associates of the organization. The next bundle to be introduced will consist of pay for performance evaluations, Leader Evaluation Metrics and incorporation of the monthly meeting model. Because the full implementation of the EBL process will occur over an extended period of time additional research using a longitudinal design should be considered. Longitudinal designs examine changes in the same subjects over time (Grove, Burns, & Gray 2013) and require the researcher to ask the same questions (Terry, 2012).

Summary

Introducing EBL as a model supported by a heuristic framework consisting of behavior bundles to be implemented at strategic time points for the reduction of nursing turnover, and improvement of job enjoyment, is a groundbreaking and new way of thinking about leadership. Each component of the EBL strategy is supported by research but the whole was lacking the support needed to truly call this leadership model *evidence based.* This project has proposed using a heuristic theory to support the EBL framework and provides a baseline for future longitudinal studies on the influence of EBL on nursing turnover and job enjoyment. This project also suggests the consideration of future research to support the effectiveness of grouping behaviors into bundles to achieve desired outcomes.

The 2010 Institute of Medicine (IOM) report, *The Future of Nursing: Leading Change, Advancing Health,* redefines the field of nursing and states "nurses should be full partners in healthcare reform" (Hassmiller & Reinhard 2015 p. 49). Creating practice

environments conducive to optimal nursing retention is critical in realization of true healthcare reform. Full implementation of the EBL strategies and behavior bundles has the potential to create the type of environment where nurses feel empowered to make decisions and the autonomy to practice at the top of their licensure.

This study followed Avedis Donabedian's advice as illustrated in the simple Quality Model: Structures + Processes= Outcomes, to implement improvement and then to measure the outcomes. Further research is needed to fully establish statistical significance of the EBL strategies on nursing turnover however; by developing the heuristic framework in this study, consultants and leaders are moved from unstructured rationalizing "it just makes sense" to structured questions measuring "did it work". With large expenditures on leadership coaching and management programs, health leaders need to understand whether or not the large expenditures produced meaningful, and more importantly, measurable improvements.

References

Aboelela, S. W., Stone, P. W., & Larson, E. L. (2007). Effectiveness of bundled

behavioral interventions to control healthcare-associated infections: a systematic

review of the Literature. *Journal of Hospital Infection, 66*(2), 101-108.

http://dx.doi.org/10.1016/j.jhin.2006.10.019.

Aiken, L. M., Burmeister, E., Clayton, S., Dalais, C., & Gardner, G. (2011). The impact

of nursing rounds on the practice environment and nurse satisfaction in intensive

care: Pre-test post-test comparative study. *International Journal of Nursing

Studies*, *48*(8), 918-925. http://dx.doi.org/10.1016/j.ijnurstu.2010.10.004

Alleyne, J. & Jumaa, M.O. (2007), Building the capacity for evidence-based clinical

nursing leadership: The role of executive co-coaching and group clinical

supervision for quality patient services. *Journal of Nursing Management, 15*(2),

230-243. http://dx.doi.org/10.1111/j.1365-2834.2007.00750.x

Bae, S. H., Mark, B., & Fried, B. (2010). Impact of nursing unit turnover on patient

outcomes in hospitals. *Journal of Nursing Scholarship*, *42*(1), 4049.

http://dx.doi.org/10.1111/j.1547-5069-2009.01319.x

Baker, S. J. (2009). Rounding for outcomes: An evidence-based tool to improve nurse

retention, patient safety, and quality care. *Journal of Emergency Nursing*, *36*(2),

162-164. http://dx.doi.org/10.1016/j.jen.2009.11.015

Barden, A. M., Griffin, M.T.Q., Donahue, M., & Fitzpatrick, J.J. (2011). Shared

governance and empowerment in registered nurses working in a hospital setting.

Nursing Administration Quarterly, 35(3), 212-218. http://dx.doi.org/

10.1097/NAQ.0b013e3181ff3845

Barochia, A. V., Cui, X., Vilberg, D., Suffredini, A., O'Grady, N. P., Banks, S. M., . . .
Eichacker, P. Q. (2010). *Critical Care Medicine, 38*(2), 668-678.
http://dx.doi.org/10.1097/CCM.0b013e3181cb0ddf

Boyle, D. K., & Miller, p. A. (2008). Focus on nursing turnover: A system-centered
performanc measure. *Nursing Management, 39(*6), 18-20.
http://dx.doi.org/10.1097/01.NUMA.000020633.81435.75

Caillier, J. G. (2014). Linking transformational leadership to self-efficacy, extra-role
behaviors, and turnover intentions in public agencies: The mediating role of goal
clarity. *Administration and Society*, 1-24.
http://dx.doi.org/10.1177/0095399713519093

Charles, L. & Cook, K. (2010). Motivating and recognizing staff (reward and recognition.
In Studer, Q. The *nurse leader handbook: The art and science of nurse
leadership.* Gulf Breeze, FL: Fire Starter.

Clark, S. P. (2006). Organizational climate and culture factors. *Annual Review of Nursing
Research, 24*(1), 255-278.

Cowden, T., Cummings, G., & Profetto-McGrath, J. (2011). Leadership practices and
staff nurses' intent to stay: a systematic review. *Journal of Nursing Management*,
19, 461-477. http://.dx.doi.org/10.1111/j.1365-2834.2011.01209.x

Davis, R., Briggs, M., Arora, S., Moss, R., & Schwappach, D. (2014). Predictors of
health care professionals' attitudes towards involvement in safety-relevant
behaviours. *Journal of Evaluation in Clinical Practice*, *20*(1), 12-19.

http://.dx.doi.org/10.1111/jep.12073

Delucia, P. R., Ott, T. E., & Palmieri, P. A. (2009). Performance in nursing. *Reviews of Human Factors and Ergonomics*, *5*(1), 1-40. http://.dx. org/10.1518/155723409x448008

Fox, R., & Abrahamson, K. (2009). A critical examination of the U.S. shortage: contributing factors, public policy implications. *Nursing Forum, 44*(4), 235-244. http://.dx.org/10.1111/j.1744-6198.2009.00149.x

Germaine, P. B., & Cummings, G. G. (2010). The influence of nursing leadership on nurse performance: A systematic literature review. *Journal of Nursing Management 18*(4)*,* 425-439. http://.dx.org/10.1111/j.1365-2834.2010.01100.x

Gormley, D. K. (2010). Are we on the same page? Staff nurse and manager perceptions of work environment, quality of care and anticipated turnover. *Journal of Nursing Management*, *19*(1), 33-40.   http://.dx.org/10.1111/j.1365-2834.2010.01163.x

Grant, B., Colello, S., Riehle, M., & Dende, D. (2010). An evaluation of the nursing practice environment and successful change management using the new generation magnet model. *Journal of Nursing Management, 18*(3), 326-331. http://.dx.org/10.1111/j.1365-2834.2010.01076.x

Groot, H. A. (2005). Evidence-based leadership: Nursing's new mandate. *Nurse Leader*, *3*(2), 37-41. http://.dx.org/10.1016/j.mnl.2005.01.004

Harrington, A., Bradley, S., Jeffers, L., Linedale, E., Kelman, S., & Killington, G. (2013). The implementation of intentional rounding using a participatory action research. *International Journal of Nursing Practice, 19*(5), 523-529.

http://.dx.org/10.1111/ijn.12101

Hassmiller, S. B., & Reinhard, S. C. (2015). A bold new vision for america's health care

system. *American Journal of Nursing 115*(2), 49-57.

Helmink, J.H., Kremers, S.P., van Boekel, L.C., van Brussel-Visser, F.N., & deVries,

N.K. (2012). Factors determining the motivation of primary health care

professionals to implement and continue the 'beweegkuur' lifestyle intervention

programme. *Journal of Evaluation in Clinical Practice, 18*(3), 682-688.

http://.dx.org/10.1111/j.1365-2753.2011.01654.x

Helwe, S., Kajermo, K.N., Tyni-Lenne, R., Guiderti, S., Samuelsson, M., Anderson, I.L.,

& Wengstrom, Y. (2011). Evidence-based practice: attitudes, knowledge and

behavior among allied health care professionals. *International Journal for Quality*

in Health Care, 23(2), 198-209. http://.dx.org/10.1093/intqhc/mzq083

Herman, H. M., Tse, A., Xu, H. B., & Wing, L. B. (2013), Why does transformational

leasdership matter for employee turnover? A multi-foci exchange perspective.

*The Leadership Quarterly, 24(*5), 763-776.

http://dx.doi.org/10.1036/j.leaqua.2013.07.005.

Hinson, T. D., & Spatz, D. L. (2011). Improving nurse retention in a large tertiary acute-

care hospital. *The Journal of Nursing Administration*, *41*(3), 103-108.

http://.dx.org/10.1097/NNA.0b013c31820c7242

Hodges, B. C., & Videto, D. M. (2011). *Assessment and planning in health programs*

(2nd ed.). Sudbury, MA: Jones & Bartlett.

Kavanagh, K. T., Cimiotti, J. P., Abusalem, S., & Coty, M. B. (2012). Moving healthcare

quality forward with nursing-sensitive value-based purchasing. *Journal of Nursing Scholarship, 44(*4), 385-395.   http://.dx.org/10.1111/j.1547-5069.2012.01469.x

Kennedy, B., Craig, J.B., Wetsel, M., Reimels, E., & Wright, J. (2013). Three nursing interventions' impact on HCAHPS scores. *Journal of Nursing Care Quality, 28* (4), 327-334.   http://.dx.org/10.1097/NCQ.0b013e31828b-494c

Ketelsen, L. (2010). Nurse leader rounding on patients. In Studer, Q. *The nurse leader handbook: The art and science of nurse leadership.* Gulf Breeze, FL: Fire Starter.

Kooker, R. M., & Kamikawa, C. (*20*10). Successful strategies to improve RB retention and patient outcomes in a large medical center in Hawaii. *Journal of Clinical Nursing*, 20, 34-39. http://.dx. org/10.1111/j.1365-2702.2010.03476.x

Lake, E. T., Shang, J., Klaus, S., & Dunton, N. (2010). Patient falls: Association with hospital magnet status and nurse unit staffing. *Research in Nursing & Health*, *33*, 413-425.   http://.dx.org/10.1002/nur.20399

Lewis, J. & Caldwell, B. J. (2005). Evidence-based leadership. *The Educational Forum, 69*(2), 182-191.

Malloch, K. (2014). Beyond transformational leadership to greater engagement: Inspiring innovation in complex organizations. *Nurse Leader*, 60-63.

Melnyk, B. M. (2012). Achieving a high reliability organization through implementation of the ARCC model of systemwide sustainability of evidence based practice. *Nursing Administration Quarterly*, *36*(2), 127-135. http://.dx.org/10.1097/NAQ.0b0.13e318249fb6a

Newel, A. & Simon, H. A. (1972). *Human Problem Solving.* Englewood Cliffs, NJ:

    Prentice Hall.

North, N., Leung, W., Ashton, T., Rassmussen, E., Hughs, F., & Finlayson, M. (2013).

    Nurse turnover in New Zealand: Costs and relationships with staffing practices

    and patient outcomes. *Journal of Nursing Management*, *21*, 419-428.

    http://dx.doi.org/10.1111/j.1365-283432012.0137.x

Olrich, T., Kalman, M., & Nigolian, M., (2012). Hourly rounding: A replication study.

    MEDSURG Nursing, 21(1), 23-36.

Palmieri, P. A., Peterson, L. T., Pesta, B. J., Filt, M. A., & Seattone, D. M. (2010).

    Safety culture as a contemporary healthcare construct: Theoretical review,

    research assessment, and translation to human resource management. *Advances in*

    Heath Care Management, 9, 97-133. http://dx.doi.org/10.1108/S1474-

    8231(2010)0000009005.

Park, S. H., Boyle, D. K., Bergquist-Beringer, D. K., Staggs, V. S., & Dunton, N. E.

    Concurrent and lagged effects of registered nurse turnover and staffing on unit

    acquired pressure ulcers. *Health Services Research, 48(*4), 1205-1225.

    http://.dx.org/10.1111/1475-6773.12158

Pfeffer, J. & Sutton R. I. (2006). Evidence-based management. *Harvard Business Review,*

    8(1), 62-74.

Polit, D. F., (2010). *Statistics and data analysis for nursing research.* (2nd ed.). Boston,

    MA: Pearson.

Porter-O'Grady, T., & Malloch, K., (2008). Beyond myth and magic: the future of

evidence-based leadership. *Nursing Administration Quarterly, 32*(3), 176-187. http://.dx. org/ 10.1097/01.NAQ.0000325174.30923.b6

Rees, S., & Leahy-Gross, K., (2012). Benchmark selection considerations. *Journal of Nursing Care Quarterly, 27*(4), 368-371. http://.dx.org/10.1097/NCQ0b013e31854bfc

Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*, *11*, 389-400.

Scott, S., & Webber, C. F. (2008). Evidence-based leadership development: the 4L framework. *Journal of Educational Administration*, *46*(6).

Simon, H. A. (1990). Invariants of human behavior. *Annual Review of Psychology. 41,* 1-19. http://dx.doi.org/10.1146/annurev.ps.41.020190.000245

Singer, S. J., & Tucker, A. L. (2014). *The evolving literature on safety walkrounds: Emerging themes and practical messages, 23*(10), 789-800. http://dx.doi.org/10.1136/bmjqs-2014-003416.

Studer, Q. (2010). How to use this book. In *The nurse leader handbook: The art and science of nurse leadership*. Gulf Breeze, FL: Fire Starter.

Studer, Q., Robinson, B. C., & Cook, K. (2010). *The HCAHPS Handbook: Hardwire your hospital for pay-for-performance success.* Gulf Breeze, FL: Fire Starter.

Tan, M., & Lang, D. (2014). Effectiveness of nurse leader rounding and post-discharge telephone calls on patient satisfaction: A systematic review protocol. *The JBI Database of Systematic Reviews and Implementation Reports 12*(1), 23-32.

http://dx.doi.org/10.111124/jbisrir-2014-12.

Thomas, E. J., Sexton, J. B., Neilands, T. B., Frankel, A., & Heimreich, R. L. (2005).
The effect of executive walk rounds on nurse safety climate attitudes: A
randomized trial of clinical units. *BMC Health Services Research, 5*(28).
http://dx.doi.org/10.1186/1472-6963-5-28.

Trinkoff, A.M., Johantgen, M., Storr, C.L., Gurses, A.P., Lang, Y., & Han, K. (2011).
Linking nursing work environment and patient outcomes. *Journal of Nursing
Regulation, 2*(1), 10-16.

Upenieks, V. V. (2003). The interrelationship of organizational characteristics of magnet
hospitals, nursing leadership, and nursing job satisfaction. *Health Care Manager*,
22(2), 83-98. Retrieved from

Walumbwa, F. O., Cropanzano, R., & Goldman, B. M. (2011). How leader-member
exchange influences effective work behaviors: Social exchange and internal-
external efficacy perspectives. *Personnel Psychology, 64*(3)*,* 739-770.
http://.dx.org/10.1111/j.1744-6570.2011.01224.x

Walumbwa, F. O., Mayer, D. M., Wang, P., Wang, H., Workman, K., & Christensen, A.
L. (2011). Linking ethical leadership to employee performance: The roles of
leader-member exchange, self-efficacy, and organizational identification.
Organizational Behavior and Human Decision Processes, 115(2)*,* 204-213.
http://.dx.org/10.1016/j.obhdp.2010.11.002.

Weberg, D. (2010). Transformational leadership and staff retention: An evidence review
with implications for healthcare systems. *Nursing Administration Quarterly,*

*34(*3), 246-258. http://.dx.org/10.1097/NAQ.0b013e3181e70298

Wolf, G., Triolo, P., & Ponte, P. R., (2008). Magnet recognition program: The next

generation. *The Journal of Nursing Administration, 38*(4), 200-204.

http://.dx.org/10.1097/01.NNA0000312759.14536.a9.

Wolosin, R., Ayala, L., & Fulton, B. R. (2012). Nursing care, inpatient satisfaction, and

value-based purchasing: Vital connections. *Journal of Nursing Administration,*

42(6), 321-325.

http://.dx.org/10.1097/NNA.ObO13e318257392b

Wong, C. A. & Laschinger, K. S. (2012). Authentic leadership, performance, and job

satisfaction: the mediating role of empowerment. *Journal of Advanced Nursing,*

69(4), 947-959. http://.dx.org/10.1111/j.1365-2648.2012.06089.x

Zaccagnini, M. E., & White, K. W. (2011). *The doctor of nursing practice essentials: A*

new model for advanced practice nursing. Sudbury, MA: Jones & Bartlett.

Zhan, C., & Miller, M. (2003). Excess length of stay, changes, and mortality attributable

to medical injuries during hospitalization. *Journal of the American Medical*

Association, *290*(14), 1868-1874. / http://.dx.org10.1001/jama.290.14.1868