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Program Evaluation of the RN Clinical Learning and Development Specialist

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Walden University

College of Health Sciences

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Brittany Montecuollo

has been found to be complete and satisfactory in all respects,
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the review committee have been made.

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Walden University
2019

Abstract

Program Evaluation of the RN Clinical Learning and Development Specialist

by

Brittany Montecuollo

MS, Walden University, 2012

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2019

Abstract

The purpose of this project was to evaluate the impact of a quality improvement strategy to implement an RN clinical learning and development specialist (CLDS) with the intent to reduce high turnover in novice nurses and low nurse engagement. The CLDS served as expert, role-model, coach, and mentor. Benner's model of novice-to-expert was used as the conceptual framework to monitor progression of nurses mentored by the CLDS. The Institute for Healthcare Improvement model for improvement was reviewed to assess the effectiveness of the CLDS on turnover rates and nurse engagement. At the time of program evaluation, the CLDS role had been operational at the project site for 8 months in inpatient and perioperative service lines. An analysis of turnover rate by headcount of 1510 RNs within the practice environment was completed. The change from the preintervention period to the postintervention period was statistically significantly lower. A nonparametric test to compare the monthly rates was used (z = -2.613; p = .005). To evaluate nurse engagement, the practice environment scale was deployed to all RN nurse residents from 9/2018 through 3/2019. A total of 166 surveys were deployed. There were 86 responses; 62 respondents were RNs with an assigned CLDS. There were no statistically significant differences in the scores between these 2 groups. The social impact of this project is important to share with nursing and operational leadership as an intervention to reduce RN turnover across healthcare settings, specifically in acute care practice areas. The issues of RN turnover and satisfaction with the practice environment are relevant across organization types and settings.

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Dedication

In dedication to my amazing support system. My husband Aaron who has never once complained about the time and energy that our family has invested in my education. To my son Hunter, who has spent nearly his entire 19 years of life with a mother in post-secondary education. To my best friend Sarah who provides endless love and support in all my endeavors. To my parents, Bill and Laurie, who set high standards for my work ethic, not in words but in actions. My resiliency and resolve developed from watching these beautiful humans work tirelessly for their family and their larger purpose. To my sister Courtney, who made me laugh when I thought I didn't have the energy to breathe. Last, but not least, to all nurses who selflessly provide care to those who are sick and suffering.

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I would like to acknowledge Dr. Barbara Niedz as my project chair, without her support and guidance, I would not have been successful. Additionally, I would like to acknowledge my entire committee for their responsiveness and support in successfully completing this project. A special thank you to Nikki Ascheman, for your help and support every step along the way.

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Section 1: Nature of the Project

Introduction

The rising complexity of healthcare shows no sign of relenting in the near future. The experienced nursing workforce and communities in general are aging. With this transition comes a necessity to adequately prepare the incoming workforce to address the needs of an aging population with complex care needs. Nurses entering the workforce today are not provided the benefit of having low-acuity assignments as they build confidence and competence in their practice. Patient acuity and emphasis on efficient resource utilization leads to assignments that are often overwhelming for the novice or advanced beginner nurse (Barry, 2014). There was a necessity to adapt the means by which novice nurses are on boarded and mentored in their first year of practice. An estimated 25% of new nurses will leave their first job within the first year (Mensik, 2017). This creates extensive burden for organizations, both financially and functionally. In addition, the problem of a novice nurse who is so dissatisfied with his or her first job role, that resignation seems to be the only option, clearly needs to be addressed in the interest of positive social change.

The purpose of this doctor of nursing practice (DNP) project was to evaluate the impact of a quality improvement strategy implemented with the intent of reducing high turnover in novice nurses and very low nurse engagement within the practice setting. The high turnover marked a critical quality improvement priority in the organization, and to resolve this, the role of the Registered Nurse clinical learning and development

specialists (RN CLDS) was created as a strategy to improve nurse engagement and retention in a tertiary medical center.

Problem Statement

At the DNP project setting in fiscal years 2017 and 2018, RN turnover was at 20% and 18% respectively. These rates are nearly double than that of the next highest organization in the health system and double the organizational goal of less than 10%. Additionally, the utilization of contracted RNs was at an all-time high of greater than100 concurrent temporary staff working on a short-term contract basis. Additionally, nurse engagement, an indicator of nurse satisfaction with the practice setting, on the National Database of Nursing Quality Indicators (NDNQI) at the DNP project site remains below the benchmark mean in greater than 51% of reporting clinical service lines. These two issues considered together, indicate a significant program for the nurse administration and frontline, novice nurses alike. Therefore, the identified practice problem is the novice nurse turnover rate coupled with the organization on boarding nearly 500 nurses in a single year. This created the obligation to ensure this large volume of novice nurses are adequately supported in the absence of an equivalent volume of proficient and expert nurse.

The setting for this project was a tertiary medical center that is part of a larger integrated health system, which is on a journey of tremendous growth and momentum. The system differentiates with vast geography, cutting-edge medicine, sophisticated research, advanced education, and an owned health plan. The organization is a level 1 trauma designated medical center that has 770+ licensed beds, over 27,000 annual

inpatient admissions, an average daily census in the low 400s, 61,000 emergency room visits, 2,800 deliveries, 2,750 RNs, and a fully integrated primary and specialty care network of ambulatory services.

The organization is on the Magnet Journey and has completed its diagnostic phase of Healthcare Performance Improvement's High Reliability Organization (HRO) program. Leader training for HRO has been initiated with all staff training slated between current date and December 2019. Nearly 500 new nurses were on boarded in the 2018 fiscal year of July 1st-June 30th. This volume of new hires is nearly double that of past years. The volume of new hires is secondary to the high RN turnover and market growth and service expansion.

The organization has strong academic partners in the community. This lends to many nursing programmatic adjustments and clinical site improvements to aid new graduate readiness. A well-developed 12-month nurse residency program exists for all new nurses (those with less than 12 months of clinical practice) and nurses who are new to the United States as part of a long-term placement program. All new nurses, regardless of clinical service area, are provided a full week of hospital orientation that covers general organizational overview and skills validation using the hospital electronic medical record (EMR) and hospital technology. Following completion of hospital orientation, the new nurse is partnered with a preceptor on the unit of hire.

Each service line has an established onboarding clinical pathway that describes the skills that the new hire RN is expected to complete during orientation. A general medical surgical orientation is six weeks and intensive care service line is 12. The new

hire pathway for a general medical surgical nurse includes 35 pages of skills that must be validated by the preceptor. At the completion of the orientation timeframe, the manager of the service line determines the new RN's ability to safely care for patients based on completion of the pathway and the feedback of the individual(s) who have served as preceptor(s). Due to a 5% increase in inpatient admissions over the past year and an increase in case mix index, the ability to give nurses modified assignments is limited and lends to increased demands on the remaining nurses on the service line, many who are also still in various stages of nursing residency. All of this further lends to the new nurse experiencing feelings of self-doubt and lack of preparedness.

Despite having a centralized education department and a well-developed nurse residency program, hospital administration determined that a new and varied approach to onboarding and mentorship was necessary in order to address the turnover and poor nursing staff engagement. The challenges of hiring nearly 500 nurses created a significant burden on the education infrastructure both within the education department and at the unit level. Nursing leadership felt strongly that the support needed to be as close to the point of service as possible. The goals were to serve as an in the moment resource while assessing the progression of the newly on boarded nurse on Benner's model of novice to expert.

In July of 2018, the concept of the Registered Nurse (RN) Clinical Learning and Development Specialist (CLDS) was created to serve as the on-the-unit resource that all nurses have access to in order to support their clinical, technical and professional goals. When viewed within the context of Benner's novice to expert theory, these individuals

are categorized as proficient or expert nurses (Benner, 1982). These nurses serve as generational translators, coaches, mentors, and support resources to the entire service line, but particularly for the nurse residents, who are in their first year of employment as RNs. They meet with the service line managers a minimum of twice a week to discuss what they have been observing on the unit in general terms and review a detailed report of progress on each of the unit's nurse residents. Together, the RNs, the unit manager and RN CLDS refine goals and create action plans for the continued development of the unit's clinical staff. The RN CLDS does not have a patient assignment and holds an exempt position which allows for tailoring of time worked based on unit needs. These professionals are assessed to be a minimum of proficient on the Benner's Model and hold a minimum of a bachelor's degree in Nursing unless provided an explicit exception by Senior Executive Nursing Leadership. The RN CLDS does not have supervisory responsibilities to decrease the perception of a power gradient among staff and this resource.

This project aims to address the high volume of turnover that is currently being experienced as the workforce ages and the volume of patients requiring care becomes higher and more complex (Koppel, Deline, & Virkstis, 2017). This new climate calls leaders to look at their approach for recruitment, retention and mentoring to ensure that the needs of the emerging workforce are addressed (Harell, 2018).

Purpose Statement

The purpose of the project was to evaluate the impact of the RN CLDS program, which has been implemented to improve the experience of the novice nurse entering

practice at a time when access to proficient and expert nurses was limited. The organization works under the premise that happy staff equates to happy patients. Patient satisfaction and safe outcomes are top priorities. Appreciating the interconnectedness of the pillars of staff experience, patient experience and patient safety led to the development of a grass roots expert to support these three pillars. The organizational burden of a constant state of onboarding is evident to preceptors, managers, the education department and administrators, the arguably most important burden is that experienced by the patient as they have trust in the confidence and competence of their nursing staff (Watson, 2016).

In order to retain nurses in this changing landscape, inexperienced nurses need to have adequate support from proficient and expert nurses (Trossman, 2015). To provide this support, a new means of utilizing tenured nurses is necessary. Despite an established nursing shared governance structure, comprehensive onboarding process and a 12-month nurse residency program, nursing turnover remains above the national average. Additionally, nurse engagement on the National Database of Nursing Quality Indicators (NDNQI) at the DNP project site remains below the benchmark mean in greater than 51% of reporting clinical service lines. These indicators are evidence of a significant gap in administrative practices, despite the resources and structures that had been in place.

Outside of the structured onboarding program that exists, there was a need for ongoing access to clinical experts who are proficient in the technical skills of the service line, the organizational policies and protocols, and are cultural role models of professional nursing for the organization (Kostrey Horner, 2017). These individuals must

be connected to unit leadership but not contribute to a perceived authority gradient among frontline staff. They must serve as experts, role-models, coaches and mentors. Proficient and expert nurses are outnumbered by novice and advanced beginner nurses by as much as 4:1 according to organizational clinical leaders. This creates a necessity to scale the knowledge and skill of these individuals in a manner that creates large scale impact outside of a single shift assignment. Thus, the DNP project practice-focused question is: Does the use of RN Clinical Learning and Development Specialists (CLDS) as mentors and as embedded resource, increase the rate of RN retention in a tertiary medical center and improve nurse engagement with the practice environment in year one of their employment?

Nature of the Doctoral Project

In order to evaluate the impact of the RN CLDS program on the organization, there are two key measurements that were used. The first was an analysis of nurse turnover at the site, for a year prior to implementation of the RN CLDS program compared to the eight months following its implementation. These data were compared by service lines and the service lines which used the RN CLDS mentors were compared to service lines which did not. All data were deidentified and provided to me as the DNP student for secondary analysis.

The second was the analysis of the Professional Practice Environment Scale which includes questions related to the nurse's participation in hospital affairs, nursing foundations for quality care, nurse manager ability, leadership, and support of nurses, staffing and resource adequacy, and collegial nurse-physician relations The survey,

which has well-established reliability and validity, was deployed by the office of nursing practice department and results compared against the service that does not have a RN CLDS available to them (Lake, 2002). Permission for utilization of the Practice Environment Scale was obtained by the Scale's author Dr. Eileen Lake. The organization does collect data annually using this scale, so some comparisons can be made from 2017-2018 to 2019; however, these data are collected in a deidentified way, so paired data comparisons for the individual nurse before and after the impact of the RN CLDS program was not possible. Nursing service line data are collected, and therefore a comparison was made on the nurse engagement practice environment between the service line PES score in 2018 against the new nurse's perception in 2019 for the service lines that have an RN CLDS mentors.

The model for improvement endorsed by the Institute for Healthcare Improvement was utilized to assess the effectiveness of the RN CLDS on turnover rates and nurse engagement with the practice environment, specifically in medical surgical and intensive care. The model for improvement is based on Deming's model of plan-do-study-act (PDSA) where the goal of rapid cycle adjustments leads to timely improvements (Langley, 2014). The analysis was completed in accordance with Walden University's manual for quality improvement evaluation projects as reducing RN turnover and improving nurse engagement was a significant quality improvement (QI) priority for the organization.

The purpose of this DNP project was to evaluate the RN CLDS program that has been operative for the past eight months at the DNP project site, and which was

designed to reduce RN turnover in the first year of employment as well as to improve nurse engagement with the practice environment. Thus, the RN CLDS program seeks to close this gap. The purpose of the DNP project was to answer the practice-focused question by evaluating the impact of the RN CLDS program on nurse turnover, intent to leave, and nurse engagement with the practice environment.

Significance

This project has the potential for significant impact in how nurses are retained and mentored. The stakeholders for this project include; patients, the novice nurse, the manager, the education department, and executive leadership. Each stakeholder has a vested interest in the safety of the patients. Additionally, the organizational stakeholders are invested in the practice environment.

As patients become sicker and expert nurses retire, supporting the incoming nursing workforce has never been more important as this is the key problem that was addressed in the DNP project. This changing dynamic will require nursing leaders to look at how to use experienced nurses in a way that keeps their skills close to the bedside while allowing their expertise to be scaled outside of a traditional shift assignment. The purpose of this DNP project was to evaluate the RN CLDS program that has been operative for the past eight months at the DNP project site and was designed to reduce RN turnover in the first year of employment as well as to improve nurse engagement with the practice environment.

Deliberate mentoring and support of new RNs in medical service areas by the RN CLDS intends to lend to positive social change through reduction in turnover rates and

improved patient and staff safety (McKinley, 2004). Registered nurse turnover comes at a significant cost to organizations. The average orientation cost to onboard RNs in the organization is over $1 million annually. By decreasing nurse turnover, patient safety and staff morale are positively impacted as nurses become more proficient and confident in their setting and skills (Amalberti, Auroy, Berwick, Barach, 2005).

Summary

The purpose of the DNP project was to answer the practice-focused question by evaluating the impact of the RN CLDS program on nurse turnover, intent to leave, and nurse engagement with the practice environment. The cost to the organization for each RN who resigns is estimated to be somewhere between $82,000-$88,000 (Schroyer, Zellers, & Abraham, 2016). This creates a financial burden on the organization as decreased reimbursement and payer mix fluctuations continue to challenge the day-to-day operations of health systems across the country where, by design, margins are as little as 1-2%. This steady volume of new nurses coming and going lends to frustration and fatigue on the part of the nurse manager, preceptor pool, and colleagues. The burden of constant staff interviewing, selection, and staffing burdens the nursing manager (Conley, 2017). As managers feel the burden of this cycle, they begin to lose resiliency, creating a negative impact on unit morale as a whole (Eyong & Rathee, 2017).

Section 2: Background and Context

Introduction

The purpose of this DNP project was to evaluate the RN CLDS program that has been operative for the past 8 months at the DNP project site that was designed to reduce RN turnover in the first year of employment as well as to improve nurse engagement with the practice environment. The intent of the DNP project was to answer the practice-focused question by evaluating the impact of the RN CLDS program on nurse turnover, intent to leave, and nurse engagement with the practice environment. This section includes a literature review exploring the concepts and theories that pertain to this DNP project. Specifically, relevant strategies to prevent new nurse turnover and interventions to maximize nurse engagement are discussed.

Concepts, Models, and Theories

The following section will review the concepts of RN turnover and techniques to maximize RN engagement. The model for improvement, endorsed by the Institute for Healthcare Improvement, was reviewed to assess the effectiveness of the RN CLDS on turnover rates and nurse engagement with the practice environment. Relevant literature on the concepts, models and theories follow.

RN Turnover and Strategies to Prevent

A comprehensive literature review using the Agree II tool and two independent reviewers appraised literature for guidelines facilitating transition of newly graduated nurses to professional nurses (Rooyen, Jordan, Ham-Baloyi, & Caka, 2018). There were eight guidelines that met the quality and rigor the authors were looking to achieve.

Through analysis, three themes emerged. The first theme related to *providing support* for last year nursing students and new graduate nurses. The second theme related to *the necessity to belong* and have *the ability to socialize*. The final theme was specific to the *learning environment* and the need for it to be positive. The authors offered these themes to influence the development of new guidelines or the amendment of existing guidelines for organization's supporting transitioning new nurses into professional practice. The role of the RN CLDS is consistent with the three themes that emerged. The RN CLDS supports new nurses in a very deliberate way by meeting every other week to discuss goals and progress during the first year of practice, they serve as a formal mentor and are trained in education strategies to promote adult learning.

A study of 1,773 nurses from 22 hospitals was conducted to survey and analyze the level of satisfaction with the nursing environment (Wieck, Dols, & Landrum, 2010). The results indicated a greater volume of younger nurses were less satisfied in comparison to more experienced nurses over the age of 40. In fact, one-third of millennials plan to leave their job in the next two years, two thirds plan to leave in the next five years. Two of the strategies identified to retain the multigenerational workforce included supporting managers and stabilizing staffing. Managers need more support, mentoring and resource than ever before to adequately appeal to the needs of all generations of the current nursing workforce. In regard to stabilizing staffing, a multipronged approach of actively engaging staff through shared governance, succession planning and providing staff access to literature and evidence specific to staffing was recommended. These interventions all related to allowing nursing to self-governed their

practice. Implementation of the RN CLDS role is intended to supplement the nurse manager so that they have a clinical resource with the competency and time to promote a positive and engaging work environment for staff.

A review of current literature and over 90 phone-based interviews with hospital-based nursing leadership were completed to understand how organizations have been successful in reducing millennial turnover (Koppel, Deline, & Virkstis, 2017). The study found that gaining loyalty as early as possible was a key component of retaining millennials, additionally, increasing nurse engagement through targeted efforts of nursing leadership was recommended to support retention across generations. Supporting nurses after they finish their formal on-boarding is critical to preventing turnover (Koppel, et, al. 2017). This is especially true for millennials who are looking for early career advancement and recognition of professional growth (Wieck, et. Al, 2010). The RN CLDS role is purposely designed to support nurses based on where they are on their competency journey. Additionally, the RN CLDS continues to supplement and augment the initial orientation that is provided to new nurses.

A comprehensive literature review on nurse turnover reviewed 68 studies to narrow down determinates of nurse turnover in acute care settings (Hayes et al., 2012). The literature review concluded that job satisfaction was a major component of intent to stay. In fact, job satisfaction preludes other factors in relevance such as rotating shifts, perceived lack of opportunities for advancement and generation or age. An important determinant in intent to stay was perceived empowerment. The impact of empowerment translates differently based on where the nurse resides within the Benner model of novice

to expert. In new grad nurses, the work environment was a significant contributor in the intent to stay. Ensuring nurses have support and a clinically competent confidant was a core principal of the RN CLDS role.

A study of 87 new graduate nurse's satisfaction with unit specific orientation showed that nurses who had been adequately prepared during orientation, based on their perceived level of competency, rated themselves less likely to leave their first role (Hussein, Salamonson, Hu, & Everett, 2018). The study was conducted on nurses completing their 12-month transition to practice program. The participants were administered the Manchester Clinical Supervision Scale and the Practice Environment Scale-Australia. In the study, participants that did not work outside of what they felt exceeded their professional clinical competency rated their intent to stay higher than those who perceived to have had to work outside their capabilities and competence. Interestingly, the new graduate nurses who worked in critical care showed an increased intent to stay in comparison to those in medical surgical areas or other non-intensive care settings. This is thought to correlate to the shorter, less intense onboarding process experienced by nurses in general medical surgical practice settings. Clinical oversight was a major component of the transition program experienced by the critical care nurses with increased intent to stay. Specific activities identified in the critical care setting that contributed to a higher intent to stay rate were formal mentorship, participation in team or unit-based projects, and having an active leadership presence.

In addition to organizational financial costs, nursing turnover has impact on the organization by taxing the preceptor base, creating inefficiencies during onboarding and

placing nursing care outcomes at risk (Hayes et al., 2012). This is thought to be associated with the mental burden experienced by the nursing staff as their colleagues leave coupled with and increased volume of new nurses. The RN CLDS, while closely connected with new grads, works with all clinical staff to strength skills and support advancement and development.

Interventions to Maximize Nurse Engagement

An integrative review utilized the Mixed Methods Appraisal Tool to analyze qualifying qualitative and quantitative studies in the exposure of new graduate nurse to negative workplace behavior in the acute care workplace (Hawkins, Jeong, & Smith, 2019). The integrative review utilized a total of 8 qualitative and 8 quantitative studies and examined the frequency and impact of negative workplace behavior or incivility on new graduate nurses. The analysis showed a varied incidence from 0.3% as a daily occurrence to 57.1% experiencing sporadic exposure. This incivility or negative behavior exposure impacts the new graduate workforce by increasing intent to leave and impact of job satisfaction (Hawkins, Jeong, & Smith, 2019). Limitations to the analysis was the wide variation in reported incidence and lack of consensual definition of negative workplace environment. Despite the limitations, there was a validation that the occurrence of negative workplace behavior has a correlation to nurse satisfaction and intent to stay. As the organization embarks on a journey of high reliability, the RN CLDS role was selected to participate in leader training to learn the leadership and universal skills that reduce power gradients that are often experienced in healthcare. This supports

the RN CLDS in having the appropriate skill set to identify and respond to negative workplace behaviors.

An integrative systematic review on work readiness examined and reviewed the resources needed by new graduate nurses to be work ready (Edward, Ousey, Playle, & Giandinoto, 2017). The themes identified through this review emerged around the importance of a positive work relationship with preceptors. The underlying implication of the integrative review determines that a positive work environment occurs when the preceptor provides mentorship and a safe environment so that the new nurse feels comfortable learning and growing.

A small phenomenological qualitative research study of 12 nurses examined the lived experience of new nurses (Brown, Hochstetler, Rode, Abraham, & Gillum, 2018). All the nurses interviewed reported a lack of professional confidence. This was experienced as frequently as daily. A component of garnering confidence was having strong collegial relationships and receiving positive feedback. Orientation was found to be key to building confidence in practice. A consistent skilled preceptor supplemented by a hospital residency and positive team work where new nurses can ask questions readily lends to satisfaction in the first year of practice. As comfort in the environment is created, the new nurse becomes better able to receive and process new information and experiences.

A mixed-method systematic review was completed on workplace related generational characteristics of nurses (Stevanin, Palese, Bressan, Vehviläinen-Julkunen, & Kvist, 2018). In the 33 studies included in the systematic review, three main themes

that emerged were job attitudes, which included intent to leave, emotion-related job aspects and practice and leadership related aspects. Regardless of generation, there was commonality noted in nurses' desire to have a reasonable workload and manageable nurse to patient ratios. The stability and competence of the workforce are driving forces in creating stable staffing and a perceived reasonable workload. Nurses must have the infrastructure and the resources to grow and develop professionally. Traditional programs for enculturation are valuable but limited in duration. An imbedded resource such as the RN CLDS may serve to assist heavily burdened managers in bolstering the clinical competency development of the unit. While the RN CLDS is heavily centered on the new graduate nurse entering practice, they are concurrently serving as a generational bridge and all staff support. They aim to provide in the moment support to assist new, intermediate and expert staff in developing and refining their practice. By creating a safe environment to receive and request support the nurse begins to develop a sense of protection, direction and order that enhances satisfaction with their practice environment (Stevanin et al., 2018).

A convergent mixed method design of 140 nurses in an Australian hospital looked at new nurses' perceptions of transition to practice (Hussein, Everett, Ramjan, Hu, & Salamonson, 2017). The nurses were surveyed on a Likert scale and through qualitative open-ended questions relating to experiences of the new nurse. An important theme was identified related to the value of ongoing support of nursing educators, managers, and team members during the transitional year. Formal orientation was essential but viewed

as the base to onboarding that needs to be supplemented with ongoing support of unit experts.

An important indicator of nurse engagement is perceived leader ability (Wieck, Dols, & Landrum, 2010). The RN CLDS decreases the burden of continuous clinical feedback and oversight to allow the manager increased time to advocate for needed resources, refine ineffective processes and recognize positive staff contributions. Nurse leader ability is measured by the practice environment scale based on the leader's responsiveness and alignment to the nursing staff.

The Model for Process Improvement

The Model for Improvement is based on Deming's model of plan-do-study-act (PDSA) where the goal of rapid cycle adjustments leads to timely improvements (Langley, 2014). The analysis was completed in accordance with Walden University's manual for quality improvement evaluation of projects as reducing RN turnover and improving nurse engagement was a significant QI priority for the organization.

The concept of the RN CLDS was developed out of a larger initiative to bring nurse educators closer to the bedside. Originally, one RN educator began working on the floor part of the time with new graduate nurses in the medical surgical departments. Nursing leadership identified the benefit this individual was having on retention and unit morale, as a result, a QI workgroup was formed to inform how this could be scaled to a broader population specifically targeting service lines where large volumes of new nurses had recently been on-boarded. The QI team reviewed literature and began the process of putting the initial project together. During the initial PDSA cycle, inpatient Service Lines

and the operating room were in scope. The observation Service Lines, ambulatory departments, and procedural Service Lines (non-OR) were excluded. The Model for Improvement endorsed by the Institute for Healthcare Improvement was utilized to assess the effectiveness of the RN CLDS on turnover rates and nurse engagement with the practice environment, specifically in medical surgical and intensive care. Since initiating the RN CLDS role, there has been several small PDSA cycles utilized by the QI team to refine scope and objectives and to add or shift resources based on demographics changes in the organization. For example, one of the RN CLDS recently accepted a manager positions, as a result, that individual's full time equivalent (FTE) was shifted to supplement high needs in the organization's medical surgical service line. As organizational priorities shift and evolve, small PDSA cycles are completed to ensure that the role of the RN CLDS evolves with the organization.

Benner's Novice to Expert Model

In 1982, Benner amended the Dreyfus Model of Skill Acquisition for nursing creating the novice to expert theory (Benner, 1982). The novice to expert model was a relevant and practical model to assess nurses' skill acquisition as they progress from novice, advanced beginner, competent, proficient, and expert level clinicians. As the nurse becomes more proficient in both skill and critical thinking, they advance along the experience continuum. The Benner model was selected for this project because of its broad utilization within nursing.

The practice organization utilizes Benner's model of novice to expert to define the tenure of their workforce. They believe that the student nurse, in their final year of

nursing school are novice level. As they enter the workforce as licensed nurses, they are prepared at the advanced beginner level. The organization works to move nurses to competent, proficient and eventually expert level throughout their career. Recognizing the large volume of new nurses over the past year, the organization struggles to ensure consistent representation of proficient and expert level nurses shift to shift. Misaligned expertise has potential for decreased satisfaction with the practice environment and perceived lack of resource access for the advanced beginner (Walker, & Campbell, 2013).

Relevance to Nursing Practice

The cost to the organization for each RN who resigns is estimated to be somewhere between $82,000-$88,000 (Schroyer et al., 2016). This creates a financial burden on the organization as decreased reimbursement and payer mix fluctuations continue to challenge the day-to-day operations of health systems across the country where, by design, margins are as little as 1-2%. An estimated 25% of new nurses will leave their first job in the first year (Mensik, 2017). This steady volume of new nurses coming and going lends to frustration and fatigue on the part of the nurse manager, preceptor pool, and colleagues. The burden of constant staff interviewing, selection, and staffing burdens the nursing manager (Conley, 2017). As managers feel the burden of this cycle, they begin to lose resiliency, creating a negative impact on unit morale as a whole (Eyong, & Rathee, 2017).

In addition to the financial cost, turnover disrupts stability in the workforce that lends to increased risk of patient safety events (Watson, 2016). The 1999 Institute of

Medicine's published report, *To Err is Human*, was illustrative of just how unsafe health care deliver was as it relies so heavily on consistent use of human err prevention principals (Rall, 2000). Unfortunately, subsequent studies lend to the realization that the original IOM report of harm was significantly under represented. The expense of knowledge, skill and rule-based errors can be catastrophic to the outcome of patients. As many as 40% of new nurse report making a serious medication error in the first year of practice (Mensik, 2017). Safety events and unintended patient outcomes can have lasting and unanticipated impact on involved team members.

A well-defined transition to practice strategy that expands beyond the first year of clinical practice is crucial to promoting enhanced nurse engagement and intent to stay (Edwards, Hawker, Carrier, & Rees, 2015). While the initial period of onboarding needs to be focused on the basics of getting the new nurse orientated to the environment and tasks associated with direct patient care, the prolonged phase of orientation needs to be centered on full-spectrum onboarding to the profession and the organization (Tomietto, Rappagliosi, Sartori, & Battistelli, 2014).

This requires organizations to look differently at how nurses are on-boarded. An easily accessible, trusted resource can assist in the assessment of staff proficiency throughout their onboarding and professional progression (Edward et al., 2017). This resource must possess the ability to demonstrate a genuine interest in the growth, development and success of the team on both an individual and group level (Cabral, Hanson, & Reilly, 2016).

Mentorship is well studied, specifically in nursing. Mentoring has been consistently defined in the literature as a safe relationship where individuals can provide feedback, have the ability to ask questions, and have accessibility to one another (Kostrey Horner, 2017). How mentoring occurs, however, is diverse. Related literature indicates mentoring can be formal or informal, scheduled or unscheduled, mutual or mandated. Mentorship has been found to be more successful when the mentor is deemed clinically competent and offers encouragement and positive support (Schroyer et al., 2016). In summary, the literature is clear about the necessity and impact of having a full spectrum onboarding strategy for new nurses.

This project has the potential to address the high volume of turnover that is currently being experienced as the workforce ages and the volume of patients requiring care becomes higher and more complex (Koppel, Deline, & Virkstis, 2017). This new climate calls leaders to look at their approach for recruitment, retention and mentoring to ensure that the needs of the emerging workforce are addressed (Harell, 2018). The role of the RN CLDS serves to address these challenges and augment the existing preceptor program by serving as a grass roots resource for the manager, new graduate nurse, and tenured staff. The RN CLDS is a clinical expert, trained educator and experienced mentor that possess respect from the unit physicians, staff and leadership. With no direct reports, the RN CLDS limits the propensity towards authority gradients.

Local Background and Context

The setting for this project was a tertiary medical center that was a part of a larger integrated health system which is on a journey of tremendous growth and momentum.

The system differentiates with vast geography, cutting-edge medicine, sophisticated research, advanced education, and an owned health plan. The organization is a level one trauma designated medical center that has 770+ licensed beds, over 27,000 annual inpatient admissions, an average daily census in the low 400s, 61,000 annual emergency room visits, 2,800 deliveries, 2,750 RNs, and a fully integrated primary and specialty care network of ambulatory services.

The organization is on the Magnet Journey and has completed its diagnostic phase of Healthcare Performance Improvement's High Reliability Organization (HRO) program that is based on detecting and correcting system weakness (Reason, 1997). Leader training for HRO has been initiated with all staff training slated between current date and December 2019. Nearly 500 new nurses were on boarded in the 2018 fiscal year of July 1st-June 30th. This volume of new hires is nearly double that of past years. This volume is related to turnover, market growth, and service expansion.

The organization has strong academic partners in the community. This lends to many nursing programmatic adjustments and clinical site improvements to aid new graduate readiness. A well-developed 12-month nurse residency program exists for all new nurses (less than 12 months of clinical practice) and nurses who are new to the United States as part of a long-term placement program. All new nurses, regardless of clinical service area, are provided a full week hospital orientation that covers general organizational overview and skills validation using the hospital electronic medical record (EMR) and hospital technology. Following completion of hospital orientation, the new nurse is partnered with a preceptor on their unit of hire.

Preceptors are given an orientation to onboarding principals and receive an hourly differential for all time spent onboarding. While the concept of a dedicated preceptor is strong, the organization has struggled to have an adequate volume of preceptors to cover the large volume of new hires. Thus, nursing leadership has made the decision to allow nurses with less than a year of experience to enter the preceptor training course. Additionally, often new nurses will have more than one preceptor assisting in their orientation. This results in advanced beginners mentoring other advanced beginners.

Each service line has an established onboarding clinical pathway that describes the skills that the new hire RN is expected to complete during their orientation. A general medical surgical orientation is six weeks and intensive care unit is 12. The new hire pathway for a general medical surgical nurse includes 35 pages of skills that must be validated by the preceptor. At the completion of the orientation time frame, the manager of the unit decides on the new RN's ability to safely care for patients based on completion of the pathway and the feedback of the individual(s) who have served as preceptor(s). Due to a 5% increase in inpatient admissions over the past year and an increase in case mix index, the ability to give nurses modified assignments is limited and lends to increased demands on the remaining nurses on the unit, many who are also still in various stages of nursing residency. All this further lends to the new nurse experiencing feelings of self-doubt and unpreparedness.

Summary of Local Terms:

New nurse: RNs with less than 12 months of experience as an RN or new to the US.

Millennial: Nurse born between 1981-1996 (Bialik, Fry, Bialik, & Fry, 2019).

Registered Nurse Clinical Learning and Development Specialist (RN CLDS): Bachelor prepared RN that serves as an informal front-line leader, mentor and confidant to staff. Trained in adult learning principals and minimum of a proficient nurse on the Benner's novice to expert theory.

Role of the DNP Student

The interest in the RN CLDS review project is rooted in a variety of personal and professional experiences. As a tenured RN, I have experienced the impact that high volume turnover has on the workforce and the outcomes of patients. A formal preceptor training program and RN nursing residency programs have proved valuable in clinical experience, still there continues to be a gap in the continued mentorship that RNs require as they move from novice to expert. The creation of the RN CLDS role attempts to fill this gap. My role in this project was to evaluate the impact of the RN CLDS program by analyzing the data presented to identify potential correlations in relation to turnover and nurse engagement with the creation of the RN CLDS program and to answer the practice-focused question: Does the use of RN CLDS as mentors and as embedded resource, increase the rate of RN retention in a tertiary medical center and improve nurse engagement with the practice environment in year one of their employment?

Role of the Project Team

The RN CLDS program has been operative for the past eight months at the DNP project site and was designed to reduce RN turnover in the first year of employment as well as to improve nurse engagement with the practice environment. Following IRB

approval 04-10-19-0180777, the project participant members were assembled to consist of a QI team comprised of an executive nursing leader sponsor, the director of nursing education, the quality director, the director of the office of nursing practice and a newly named supervisor for the CLDS group. All proposed project team members are nurses with the expectation of the quality director who holds a master's in public health. The nurse representatives are all tenured and hold a master's in nursing. The role of the project team was to collect pre and post intervention practice environment scale data and nursing turnover rates, the analyses of which will provide insight to answer the practice-focused question.

Summary

In this section, current relevant literature was reviewed on the implications and prevention of turnover and strategies to maximize nurse engagement. The local background and context for utilization of the RN CLDS was presented as was the relevance of this program to nursing practice. A description of the project team and DNP student role were defined.

Section 3: Collection and Analysis of Evidence

Introduction

The setting for this project was a tertiary medical center that was a part of a larger integrated health system which is on a journey of tremendous growth and momentum. The system differentiates with vast geography, cutting-edge medicine, sophisticated research, advanced education, and an owned health plan. The organization was a level one trauma designated medical center that has over 770 licensed beds. Market growth and high nursing turnover have resulted in the necessity to develop interventions to maximize nurse engagement and reduce nursing turnover.

The purpose of this DNP project was to evaluate the RN CLDS program that has been operative for the past eight months at the DNP project site. The RN CLDS program was designed to reduce RN turnover in a new nurse's first year of employment as well as to improve nurse engagement with the practice environment. The intent of the DNP project was to answer the practice-focused question by evaluating the impact of the RN CLDS program on nurse turnover, intent to leave, and nurse engagement with the practice environment. This section includes a review of the evidence that supports this project including published outcomes and research, the archival and operational data that was used in the evaluation of the RN CLDS program and the evidence generated for the doctoral project.

Practice-Focused Question

This project addresses the high volume of turnover that is currently being experienced as the workforce ages and the volume of patients requiring care becomes

higher and more complex (Koppel, Deline, & Virkstis, 2017). This new climate calls leaders to look at their approach for recruitment, retention and mentoring to ensure that the needs of the emerging workforce are addressed (Harell, 2018). The purpose of the DNP project was to answer the practice-focused question by evaluating the impact of the RN CLDS program on nurse turnover and nurse engagement with the practice environment.

Sources of Evidence

In order to evaluate the impact of the RN CLDS program on the organization, there are two key measurements that were used. The first was an analysis of nurse turnover at the site, for a year prior to implementation of the RN CLDS program compared to the eight months following its implementation. The data from service lines which used the RN CLDS mentors was compared to service line which did not. All data was de-identified and provided to me as the DNP student for secondary analyses.

The second was the analysis of the Practice Environment Scale which includes questions related to the nurse's participation in hospital affairs, nursing foundations for quality care, nurse manager ability, leadership, and support of nurses, staffing and resource adequacy, and collegial nurse-physician relations The survey, which has well-established reliability and validity, was deployed by department and results compared against service lines that do not have a RN CLDS available to them (Lake, 2002).

Published Outcomes and Research

In review of relevant literature, a search of CINAHL, EBSCOhost, Medline, and PubMed data bases were conducted. Included in the review were peer reviewed articles

from 2009-2019. Research terms and keywords included new graduate nurse, nursing workforce, and nurse transition to practice, clinical supervision, job satisfaction, novice nurse, professional socialization, role modeling, nurse engagement, preceptor, nursing mentorship, and new nurse retention. Literature not printed in English was excluded from the review.

Archival and Operational Data

In order to analyze turnover, the organization's data analytics team pulled data for eight months preintervention and the year postintervention by department. The organization monitors turnover by headcount. The data were provided by data analytics to the DNP QI project team for project analysis. A comparison of RN turnover by service line over the pre- and postintervention timeframe was included. This examines the impact on new nurse turnover following implementation of the RN CLDS.

The second measurement that was utilized was the Professional Practice Environment Scale (PES). This scale is conceptually grounded and measures components of clinical practice (Lake, 2002). It is designed for acute care settings and has been utilized on an annual basis at the practice site to measure nurse satisfaction with their practice environment. The organization's deployment of the PES includes the domains of *nurse's participation in hospital affairs, nursing foundations for quality care*, *nurse manager ability, leadership, and support of nurses, staffing and resource adequacy*, and *collegial nurse-physician relations.* Psychometric measurement on PES is sound with a Cronbach α of .92 demonstrating internal consistency reliability in the validation sample (Erickson, Duffy, Ditomassi, & Jones, 2009).

Permission for utilization of the Practice Environment Scale was obtained from Dr. Eileen Lake, the instrument's author (see Appendix B.) The organization collects data annually using this scale, so some comparisons can be made from 2018 to 2019; however, these data are collected in a deidentified way, so paired data comparisons for the individual nurse before and after the impact of the RN CLDS program is not be possible. Nursing service line data are collected, and therefore a comparison can made on the nurse engagement practice environment between the service line PES score in 2018 against the new nurses' perceptions in 2019 for the service line that have RN CLDS mentors.

Evidence Generated for the Doctoral Project

Participants. Nurse residents who have started nurse residency since the implementation of the RN CLDS received the PES via survey monkey. The first cohort post implementation of the RN CLDS began in September of 2018. There was a total of 166 participants who received the survey. These nurses have all had orientation but not all have had an RN CLDS. The 166 nurses fell into, essentially five categories: nurses who work on medical-surgical nursing unit, those who work in the perioperative areas, those who work in maternal services, nurses who work in critical care service lines and those who work in various procedure rooms monitoring conscious sedation. This last category of nurses did not benefit from the RN CLDS mentors and was used for comparison purposes.

Procedures. The RN practice site coordinator deployed the survey via survey monkey. The results were returned anonymously. The only identifier was the practice

location. Survey participation was voluntary, and no enticements were used. All nurse residents, regardless of status (completion or in progress), starting September 2018 were included in the survey deployment. Nurse residency is a mandatory organization requirement for all nurses who have less than one year of RN experience at the time of employment and nurses that are new to the US.

The PES has been psychometrically evaluated for acute care settings. Psychometric measurement on PES is sound with a Cronbach α of .92 for internal consistency reliability (Erickson, Duffy, Ditomassi, & Jones, 2009), see Appendix A. With a sample size of over 1500 participants during psychometric evaluation, a random sample cross-validation was also completed which further validated construct validity (Erickson, Duffy, Ditomassi, & Jones, 2009).

Protections. The proposed methodology was reviewed by the organization's Vice President of Research to ensure that required approvals were obtained at the practice site. Inclusion criteria for organizational IRB approval were reviewed and determined by the VP of Research. Utilization of Walden's QI manual was formally approved by the organization's president and quality leaders prior to project initiation. Walden IRB process was completed per university requirements with approval number 04-10-19-0180777.

Analyses and Synthesis

Following approval of organizational and Walden IRB, data were supplied in a de-identified manner via excel spreadsheet by the organization's project team. The data was utilized to analyze relationship between nurse turnover and engagement in the

departments that have an RN CLDS. The nurse turnover data was graphed by month on a run chart, displaying the change in RN turnover over a period which includes 2018 and part of 2019 data. This timeframe represents one year prior to the initiation of the RN CLDS program, and an eight-month period of time during which the new graduates have been supported by the RN CLDS mentors. Descriptive statistics were used as well as the graph with trend line to demonstrate the change. Logistic regression was used to compare overall changes over time and to determine the trend was statistically significant. The PES was also utilized for comparisons from before the RN CLDS program was developed and implemented to a nine-month period of time afterwards, as well as using comparisons from those Service Lines that used the RN CLDS mentors to those which did not. Due to a lack of normal distribution, the nonparametric, Mann-Whitney test was utilized. In addition to identifying relationships between the RN CLDS role and nurse engagement and turnover, the synthesis of data will provide the organization with insight on how additional PDSA cycles could be directed to refine the RN CLDS role and distribution of resources. Full details of the findings are provided in section 4.

Summary

In this section, a summary of how data was collected and analyzed was described. The goal of this section was to describe how participants were selected and protected in the pursuit of analysis of the RN CLDS program on new nurse turnover and engagement. A description of the reliability and validity of the PES was reviewed.

Section 4: Findings and Recommendations

Introduction

The DNP QI project aimed to address the high volume of nurse turnover and low nurse engagement within the practice environment as new nurses have joined the practice site. Despite having a centralized education department and a well-developed nurse residency program, hospital administration determined that a new and varied approach to onboarding and mentorship was necessary in order to address the turnover and poor nursing staff engagement. In planning for the volume of new nurses, nursing leadership decided a new approach to onboarding and mentorship was necessary.

This project aimed to address the high volume of turnover that is currently being experienced as the workforce ages and the volume of patients requiring care becomes higher and more complex (Koppel, Deline, & Virkstis, 2017). This new climate calls leaders to look at their approach for recruitment, retention and mentoring to ensure that the needs of the emerging workforce are addressed (Harell, 2018). The model for improvement and the Benner's model of novice to expert were utilized. This section will provide the results that were obtained from the DNP project and the strengths, weakness, and implications for creating an RN CLDS program.

Findings and Implications

RN Turnover

The RN turnover rate was one of the key metrics that the RN CLDS program intended to address. All data were provided in a de-identified manner to respect the anonymity of the individuals and practice organization. The overall results, as presented

in Table 1, and Figure 1 show a decrease in nurse turnover and a downward trend. The change from the pre-intervention period to the post intervention period is statistically significantly lower. A non-parametric test to compare the monthly rates was used because the data were not normally distributed (z = -2.613; p = .005)

Table 1

Turnover Data: Pre and Post-Intervention

Time Period	1.2016-6.2018	7.2018-2.2019
Intervention Period	Pre	Post
Numerator	233	222
Denominator	1353	1510
Rate	17.24%	14.70%

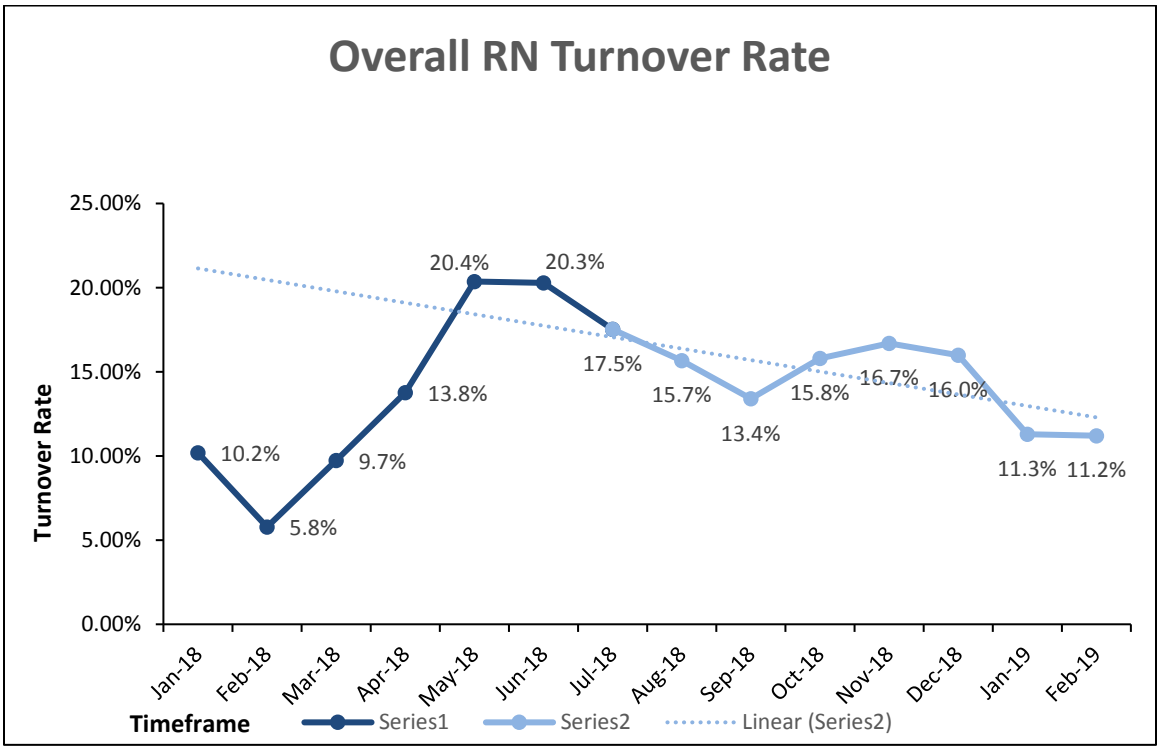

Figure 1. Overall RN turnover rate January 2018-February 2019.

In the analysis of the non-OR procedural areas, where the RN CLDS strategy was not implemented, when compared to the services lines that used the RN CLDS, a nonparametric test was again used, due to a violation of the normality assumption. The post-intervention turnover for service lines with the RN CLDS program is statistically significantly lower than the post-intervention turnover rates ($z = -2.7419$; $p = .003$) for service lines without the RN CLDS program, see Table 2.

Table 2

RN Turnover: Units With and Without CLDS

Time Period	1.2016-6.2018	7.2018-2.2019
Intervention Period	No RN CLDS Post	All Other Service Lines Post
Num	15	170
Den	83	1139
Rate	18.05%	14.89%

Practice Environment Scale

The practice environment scale (PES) was deployed to all RN residents from September 2018 through March 2019. There were a 166 eligible RNs who received a SurveyMonkey link via their work email. A total of 101 responses were recorded, only 86 were included for analysis. The remaining 15 surveys were excluded due to submission of incomplete surveys. The low response rate may have been related to contributing factors. First of all, a concurrent safety survey was in process at the practice location at the same time that the PES was sent. The second factor was inclement weather. Finally, two separate nurse residency classes were rescheduled during the time period that the survey was open. Dedicated time was set aside for nurse residents to complete the survey

at the end of the day in nurse residency, if they choose to do so, to prevent the nurses from having to use time during their patient care shift.

The PES is a 30-item instrument with established reliability and validity (Lake, 2002), see Appendix A. All 30 items are measured using a forced-choice, four-point Likert scale which range from 1=strongly disagree, to 4=strongly agree. All items are phrased positively, thus the highest and most positive score on the instrument equates to a score of 120 points when all 30 items are summed. The lowest possible score is a score of 30. The scores across the 86 participants ranged from a low score of 56 points to a high score of 124. Utilizing descriptive statistics, the mean score was 92.08 and the standard deviation was 11.99. Of the 86 participants, there were 62 respondents who were RNs with an assigned CLDS; there were 24 respondents from areas without a CLDS support. There were no statistically significant differences in the scores between these two groups. Average scores across service areas are summarized in Table 3.

Interestingly, the units without an RN CLDS scored higher on the PES than the service lines that did not. This can potentially be contributed to these service lines being prioritized last for RN CLDS implementation as their leadership team perceived that these areas had stabilized in turnover and practice environment scale performance. The areas with the most significant turnover and engagement were prioritized over the non-OR procedure and outpatient/other areas which had more stability in leadership and staff. Continued trending will be required to determine how the RN CLDS will impact PES. At this time, these data do not show a statistically significant difference between the service lines with RN CLDS and those without.

However, utilizing the nonparametric test, Mann-Whitney, it is interesting that there was a statistically significant difference between the medical-surgical areas, and the Intensive/Intermediate care service areas (z=-2.562, p=.009*)*. This may be related to a methodological issue, that is, small sample size, but it may also be related to the fact that the medical surgical areas were heavily invested in the RN CLDS process and were seeing the results on nurses' perception of the practice environment. The critical areas already receive a more intense orientation than the medical surgical areas. It may be the case that the critical care areas needed a bit more attention, despite the presence of the RN CLDS, as these data seem to suggest.

Table 3

PES Scores by Service Area

Service Area	n	Minimum	Maximum	Mean	Standard Deviation
Family Birth Center	5	81	103	93	8.49
Intensive/Intermediate Care	9	71	96	83	8.34
Medical Surgical	21	66	116	94	11.16
Other	11	56	124	89.45	19.63
Outpatient	13	77	106	91.23	10.22
Pediatrics	15	79	115	94.53	9.57
Perioperative	12	83	119	95.5	10.84

Another interesting finding is related to the overall PES results from 2018 as compared to 2019. These results are measured in mean scores (not sum scores) on a forced choice scale where 1= strongly disagree and 4=strongly agree, do not show statistically significant results overall. The mean score for the medical-surgical areas in 2018 was 2.77 and the mean score in 2019 for the medical surgical novice nurses was 3.11 which is a statistically significant improvement (t=2.76, p=.006*).*

Recommendations

Based on analysis of the RN CLDS role, there is statistically significant evidence supporting the impact on reducing RN turnover. Continued trending is recommended to ensure sustained results. A continued review of these data will also assist the organization in the necessity to do small PDSA cycles as rates fluctuate. These small test of changes and careful attention to leading and lagging indicators assist organizations in identifying and managing risk and outcomes (Reason, 1997).

Considering the statistically significant difference in turnover rates between the intervention service lines and the non-intervention service line, some consideration as to adding an RN CLDS to the non-OR procedural areas may be reasonable. Additionally, as the organization grows and refines the RN CLDS role, an analysis of the RN CLDS to RN FTE ratio should be considered. In order to be highly reliable, an organization needs to have processes and procedures that operate as intended consistently (Clapper, Merlino, & Stockmeier, 2019). Today, there is variability in how many nurses are supported by each RN CLDS based on turnover rates and service line size. A more refined approach to allocation of resources is a consideration that may be made.

Contributions of the Project Team

The DNP project team was pivotal in assisting me, as the project manager, in data collection and organizational navigation. The members consisted of an executive nursing leader sponsor, the director of nursing education, the quality director, the director of the office of nursing practice and a newly named supervisor for the CLDS group. All project team members were nurses with the exception of the quality director who holds a

master's in public health. The nurse representatives are all tenured and hold a master's in nursing. The role of the project team was to collect pre and post intervention practice environment scale data and nursing turnover rates, the analyses of which provides insight to answer the practice-focused question.

The project team managed the details of the PES survey deployment to new RNs. They deployed via SurveyMonkey and obtained the results anonymously. The results were then provide to me by service line with individual scores per item. The project team also collected headcount FTE turnover rates by service line for 2016 through February 2019 to provide eight data points following implementation of the RN CLDS program.

Strengths and Limitations

The creation and addition of a new clinical role in the current healthcare landscape can be a challenge due to difficulty recruiting and retaining clinical staff to provide direct patient care and the financial implications associated with adding new FTEs (Administrators, 2019). The practice organization is financially stable and was able to invest in the new FTEs necessary to implement the QI project as proposed by the QI team. This was a significant strength of the project.

An additionally strength was the support of nursing leaders including executive directors, directors and managers lend to accelerated adoption of the RN CLDS concept. Without engaged and supportive leaders, any performance improvement project has a compromised success potential (Clapper et al., 2019). The nursing leaders, being fatigued with the constant churn of staff requested that the project team review best practice, complete a literature review and propose a tailored concept to address RN turnover and

satisfaction within the practice environment. The QI team used these criteria to provide the initial proposal and subsequently launched the RN CLDS program with support of the nursing leadership team.

A limitation of the project was in the analysis of the PES results. The organization collects data annually using this scale, so some comparisons could be made from 2018 to 2019; however, these data are collected in a de-identified way, so paired data comparisons for the individual nurse before and after the impact of the RN CLDS program was not possible. Additionally, the survey deployment correlated with another large safety survey at the practice site. This potentially contributed to low response rate from participants.

In this section, a review of the results of RN turnover and PES were analyzed to examine the impact of the RN CLDS program at the practice location. Recommendations, contributions of the project team, strengths and limitations of the project were reviewed. The following section will provide a dissemination plan.

Section 5: Dissemination Plan

Introduction

The purpose of the DNP project was to answer the practice-focused question by evaluating the impact of the RN CLDS program on nurse turnover and nurse engagement with the practice environment. The cost to the organization for each RN who resigns is estimated to be somewhere between $82,000-$88,000 (Schroyer et al., 2016). This creates a financial and operational burden on the organization. This steady volume of new nurses coming and going leads to frustration and fatigue on the part of the nurse manager, preceptor pool, and colleagues. The burden of constant staff interviewing, selection, and staffing burdens the nursing manager (Conley, 2017). As managers feel the burden of this cycle, they begin to lose resiliency, creating a negative impact on unit morale as a whole (Eyong & Rathee, 2017).

Deliberate mentoring and support of new RNs in medical service areas by the RN CLDS will lead to positive social change through reduction in turnover rates and improved patient and staff safety (McKinley, 2004). By decreasing nurse turnover, patient safety and staff morale are positively impacted as nurses become more proficient and confident in their setting and skills (Amalberti, Auroy, Berwick, Barach, 2005).

The analysis of the practice environment scale indicated no statistically significant difference between the group that had the RN CLDS and the group who did not. Continued trending will need to continue to fully understand the RN CLDS role on nurse engagement. Conversely, RN turnover pre and post intervention did show statistically significant results between the intervention and non-intervention group. This project

utilized the model for improvement and the Benner's model of novice to expert. This section will provide an analysis of self and recommendations for dissemination.

Analysis of Self

Throughout the project and DNP course work, I have developed both personally and professionally. This has been a long and turbulent journey, none of which I would change. As I worked on this project, I have garnered new friendships and professional relationships, been challenged outside of my comfort zone, and refined my view of healthcare and nursing practice.

The DNP coursework and project have been beneficial in my nursing leadership journey as executive and Chief Nursing Officer. I am able to see the broad impact that education has had on myself and on the larger organization. Because of my personal educational journey, I am a more supportive leader to my employees pursuing advancement through education. This appreciation comes with a recognition that the organization, the larger healthcare industry and the individual benefit from advanced education and the rigor that is required to successfully complete program requirements. Additionally, as I continue on my leadership journey, I feel better prepared to utilize evidence and conduct projects in a scholarly way for the benefit of the nursing workforce and in the delivery of safety patient care.

Dissemination Plan

The findings from this DNP project are important to share with a broad audience in healthcare. The issues of RN turnover and satisfaction with the practice environment are

relevant across organization types and settings. Dissemination of evidence-based practice is necessary to advance nursing and healthcare for the collective social benefit.

Within the practice organization, there are several groups within the practice setting that would benefit from the results of the DNP QI project outcomes. The first group that would benefit is the executive leadership group, this consists of all the executives, including nursing, operations and finance, who collectively make operational decisions for the organization. These findings begin to provide direction to the operational and financial implications that must be considered as requests to add RN CLDS resources occur.

The second group is the clinical director group. This group is accountable to the clinical outcomes of their service lines and to the financial performance of their departments. They are accountable to their turnover rate and service line budgets.

The third group that would benefit from these findings is the centralized nursing education leadership group. Historically, they have been the exclusive entity responsible for structuring and executing on the new hire onboarding. The addition of the RN CLDS role has the potential to continue to evolve to augment the orientation process. Continuing to build relationships and ensure role clarity among groups will reduce redundancy or gaps.

The fourth group that would benefit from these findings is the nursing senate. The organization is on the Magnet® Journey and has worked hard to improve its nursing shared governance structure. One of the priorities of the nursing senate has been

increasing the nurse engagement in new and tenured staff. The RN CLDS role aimed to make this impact as well.

The fifth group the finding will be shared with is the nursing executive council, these are the nursing leaders accountable for the nursing care at each market hospital. The nursing leaders are expected to share best practices and to support one another in the pursuit of clinical excellence.

The final group that benefit from the findings is the existing RN CLDS group. As they work to improve nurse engagement and decrease turnover, this information is beneficial to help them inform their practice and priorities. Additionally, their hard work and innovation has been the driving force behind the success demonstrated to date. Appreciation for their resiliency, dedication and passion is well-deserved.

How each group receives the information will be tailored to the level of detail necessary to drive their decision making. For example, the presentation to executive nursing leadership will be less detailed than to the nursing directors who need a deeper understanding of the RN CLDS program and objectives in order to be an active frontline partner.

A series a different modalities will be utilized in the presentation of these data. Power point presentation, submission to the nursing newsletter, and one-page executive briefings will be utilized to communicate the key performance indicators. This tailored approach will assist in ensuring that optimal attention is garnered from each stakeholder group based on their investment and perspective.

Outside of the practice environment, this project will be submitted for presentation consideration at national conferences including AONE and IHI. Additionally, the work will be consolidate for a publication in a relevant nursing journal such as Nursing Economics or the ANA Journal, The goal of external dissemination is to positively impact social change in the nursing workforce in a broad manner.

Summary

In this section, a plan for implementation was reviewed. This plan was inclusive of important stakeholder groups and modalities for dissemination. Additionally, an analysis of self was completed.

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Appendix A: Nurse Engagement, Practice Environment Survey

1. Please check one of the following:
   I am currently enrolled in the Nurse Residency Program
   I have completed the Nurse Residency Program

2. What is your current work group/area?
   Medi/Surg
   Birth Center
   Intensive/Intermediate Care
   Procedural
   Outpatient (ED, Infusion, etc.)
   Pediatrics
   Other

3. Career development/clinical ladder opportunity
   Strongly agree
   Agree
   Disagree
   Strongly disagree

4. Opportunity for staff nurses to participate in policy decisions
   Strongly agree
   Agree
   Disagree
   Strongly disagree

5. A chief nursing officer which is highly visible and accessible to staff
   Strongly agree
   Agree
   Disagree
   Strongly disagree

6. A chief nursing officer equal in power and authority to other top-level hospital executives
   Strongly agree
   Agree
   Disagree
   Strongly disagree

7. Opportunities for advancement
   Strongly agree
   Agree

Disagree
Strongly disagree

8. Administration that listens and responds to employee concerns
   Strongly agree
   Agree
   Disagree
   Strongly disagree

9. Staff nurses are involved in the internal governance of the hospital (e.g., practice and policy committees)
   Strongly agree
   Agree
   Disagree
   Strongly disagree

10. Staff nurses have the opportunity to serve on hospital and nursing committees
    Strongly agree
    Agree
    Disagree
    Strongly disagree

11. Nursing administrators consult with staff on daily problems and procedures
    Strongly agree
    Agree
    Disagree
    Strongly disagree

12. Active staff development or continuing education programs for nurses
    Strongly agree
    Agree
    Disagree
    Strongly disagree

13. High standards of nursing care are expected by the administration
    Strongly agree
    Agree
    Disagree
    Strongly disagree

14. A clear philosophy of nursing that pervades the patient care environment
    Strongly agree
    Agree
    Disagree

Strongly disagree

15. Working with nurses who are clinically competent
    Strongly agree
    Agree
    Disagree
    Strongly disagree

16. An active quality assurance program
    Strongly agree
    Agree
    Disagree
    Strongly disagree

17. Preceptor program for newly hired RNs
    Strongly agree
    Agree
    Disagree
    Strongly disagree

18. Nursing care is based on a nursing, rather than medical, model
    Strongly agree
    Agree
    Disagree
    Strongly disagree

19. Written, up-to-date nursing care plans for all patients
    Strongly agree
    Agree
    Disagree
    Strongly disagree

20. Patient care assignments that foster continuity of care, i.e., the same nurse cares for the patient from one day to the next
    Strongly agree
    Agree
    Disagree
    Strongly disagree

21. Use of nursing diagnoses
    Strongly agree
    Agree
    Disagree
    Strongly disagree

22. A supervisory staff that is supportive of the nurses
    Strongly agree
    Agree
    Disagree
    Strongly disagree

23. Supervisors use mistakes as learning opportunities, not criticism
    Strongly agree
    Agree
    Disagree
    Strongly disagree

24. A nurse manager who was a good manager and leader
    Strongly agree
    Agree
    Disagree
    Strongly disagree

25. Praise and recognition for a job well done
    Strongly agree
    Agree
    Disagree
    Strongly disagree

26. A nurse manager who backs up the nursing staff in decision-making, even if the conflict is with a physician
    Strongly agree
    Agree
    Disagree
    Strongly disagree

27. Adequate support services allow me to spend time with my patients
    Strongly agree
    Agree
    Disagree
    Strongly disagree

28. Enough time and opportunity to discuss patient care problems with other nurses
    Strongly agree
    Agree
    Disagree
    Strongly disagree

29. Enough registered nurses to provide quality patient care
    Strongly agree
    Agree
    Disagree
    Strongly disagree

30. Enough staff to get the work done
    Strongly agree
    Agree
    Disagree
    Strongly disagree

31. Physicians and nurses have good working relationships
    Strongly agree
    Agree
    Disagree
    Strongly disagree

32. A lot of team work between nurses and physicians
    Strongly agree
    Agree
    Disagree
    Strongly disagree

33. Collaboration (joint practice) between nurse
    Strongly agree
    Agree
    Disagree
    Strongly disagree

Appendix B: Permission to use the Nurse Engagement Practice Environment Survey

Below is communication providing permission to use the PES from the author, Lake, (2002). Of note, the PES is in the public domain and endorsed by the National Quality Forum.

Dear Brittany Montecuollo,

Thank you for your email to Dr. Lake. Enclosed, please find the instrument, scoring instructions, an article containing PES-NWI scores for ANCC Magnet hospitals from 1998 in Table 1, and a Warshawsky & Haven article you may find useful. These materials are sent to everyone who makes the request.

Dr. Lake's permission is not needed as the instrument is in the public domain due to its endorsement by the National Quality Forum in 2004 and re-endorsement in 2009: http://www.qualityforum.org/QPS/QPSTool.aspx?m=1129&e=3. However, if you prefer to have Dr. Lake's permission, this email serves as her permission.

Please direct any reply to Dr. Eileen Lake at elake@nursing.upenn.edu. If you need anything else, feel free to write to us again.

All the best,

Andrea Barol
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Center for Health Outcomes and Policy Research
University of Pennsylvania School of Nursing
418 Curie Boulevard, 378R, Philadelphia, PA 19104
215-898-4727 (Office)