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A Quality Improvement Evaluation on a Nurse Residency Program

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Walden University

College of Nursing

This is to certify that the doctoral study by

Mary Richards

has been found to be complete and satisfactory in all respects,
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Walden University

2022

Abstract

A Quality Improvement Evaluation on a Nurse Residency Program

by

Mary Christine Richards

MS, Wilks Barre University 2019

BS, University of Phoenix, 2017

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

Walden University

May 2022

Abstract

The purpose of this DNP project was to explore new graduate nurse (NGN) residency program retention data in a large healthcare system to assess if participant retention met or exceeded identified retention benchmarks. The second project question explored NGNs' reasons for leaving the organization after the first year of experience. The Plan Do Study Act model framed this quality improvement evaluation project. The total number of NGN residency participants for the system in 2020 was 586 and 680 in 2021. Year one retention in 2020 was 539 (92%). Year one retention in 2021 was 625 (92%). Year two retention data were not collected by the organization. These retention rates met the national NGN residency program reported retention rates at the end of one year ranging from 74% to 100%. The organization also reported deidentified aggregate data that during exit interviews with NGN participants reasons for leaving the organization prior to one year employment included better pay, better working conditions, personal reasons, relocation, and inability to handle the demands of the organization. Although NGN retention after year one was strong, recommendations to the organization included collecting year two retention rate data, addressing how to help NGNs handle the ever-changing demands of the profession as well as the pay and working conditions within the organization. This project supported positive social change by addressing the importance of NGN residency programs for the organization and factors that may be addressed to improve retention.

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Dedication

This study is wholeheartedly dedicated to my professor Dr. Diane Whitehead for inspiring me to persevere despite many obstacles this year has held. Dr. Diane Whitehead has continually provided wisdom, guidance, resource of knowledge, and encouragement to finish this project.

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Thank you to the faculty for your feedback, care, and commitment to excellence, during my Doctor of Nursing journey. Walden University truly has the most exceptional faculty members who consistently offer support, guidance, and collective wisdom found nowhere else.

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Section 1: Nature of the Project

Introduction

New graduate nurses (NGN) are registered nurses working in their first clinical position post-graduation (Kukkonen et al., 2019). The 2019 National Healthcare Retention and RN Staffing Report found that the first-year turnover accounts for 27.7% of the nursing turnover within US hospitals. By the end of two years, NGN turnover can increase to over 48% (Asber, 2019). Given the importance of nurse retention in terms of professional commitment, the safety of patients, team building, and fiscal responsibilities in healthcare, the concern for NGN should be addressed (Guerrero, 2017; Walsh, 2018).

NGN programs are designed to increase competency, instill confidence, and support the NGN transition into their career. An extensive national healthcare system provides an NGN residency program for NGN who have completed a prior 12-week NGN didactic, simulation, and precepted clinical experience. Following the program, the NGN becomes a nurse resident. Residents sign a 2-year contract with the hospital and agree to participate in a class once a month with an evidence-based project to complete on the facility's first year of employment. NGN who participates in nurse residency programs can positively affect the retention and organizational commitment of the participants. These participants also impact communication and teamwork with other health care professionals, which affects organizational change. Moreover, through transformative changes by the participants and their mentors, patient outcomes have improved (Kramer et al., 2012). Evaluating these programs for the large hospital system

is an important measure to demonstrate positive social change through improved organizational and patient outcomes.

Problem Statement

This healthcare system's concern is the investment into nurse residency programs for NGN and the increasing turnover rates after the first and second years of experience. NGN are offered contracts to work for the hospital organization totaling two years. NGNs are breaking contracts or leaving after the contract is over to other facilities for a bonus, better pay, or lower nurse ratios. The other hospitals will pay off the contract just to sign the experienced NGN. The costs of training NGN, the safety factor, and the time commitment into the NGN nurse residency are key areas of concern for the healthcare system.

Purpose Statement

The purpose of this Doctor of Nursing practice project is to examine if the nurse residency program in a large southeast metropolitan area meets or exceeds the nurse retention benchmarks for the southeast organization over the last four years. The NGN residency program data on retention in the southeast for a national hospital system will be reviewed for year one and year two. In addition, de-identified data from exit interviews will be examined to identify NGN residency participants' reasons for leaving the healthcare system. The practice questions are:

- Does the NGN residency program retention data in a large healthcare system meet or exceed identified retention benchmarks for the organization?

- What are the identified reasons for NGN residency participants leaving the organization after the first or second years of experience?

Nature of the Doctoral Project

This project will follow the guidelines set forth in the Walden University DNP Manual for Quality Improvement Evaluation. The NGN residency program data on retention in the southeast for a national hospital system will be reviewed for the past two years. In addition, de-identified data from exit interviews will be reviewed to identify participant reasons for leaving the healthcare system. Evidence supporting the importance of nurse residency programs will be explored through the Walden University library's online databases. These sources include CINAHL Plus with full text, Embase, ProQuest Nursing and Allied Health, PubMed, and Google Scholar. Keywords include but may not be limited to nursing attrition, nurse residency programs, new nurse residency programs, novice nurse residency programs and nursing retention. Sources of evidence will be peer-reviewed articles published in English within the past five years.

Significance

The stakeholders are the nurse leaders and nurses in the large hospital system. The impact on nursing leaders and nurses is tremendous. Leaders must continuously hire and train to meet the patient census demands, and the experienced nurses have to precept new nurses. Moreover, many seasoned nurses are gearing up for retirement and leaving the profession faster than the new nurses are hired and trained (Chant & Westendorf, 2019). The morale for both leaders and nurses are consistently challenged, meeting the units staffed with experienced nurses. The doctoral project's potential contributions could

improve nurse retention by uncovering the data behind the loss. The potential for social change is the improvement in nurse and patient satisfaction.

Summary

Section 1 introduced the gap in practice, the healthcare system's problem related to a nurse residency program retention, and the importance of NGN residency programs to the nursing profession. The practice questions are:

- Does the NGN residency program retention data in a large healthcare system meet or exceed identified retention benchmarks for the organization?
- What are the identified reasons for NGN residency participants leaving the organization after the first or second years of experience?

Section 2 will introduce the model framing the project, the evidence relevant to the project, and my role in planning, implementing, and evaluating this project.

Section 2: Background and Context

Introduction

New graduate nurses (NGN) are registered nurses working in their first clinical position post-graduation (Kukkonen et al., 2019). The 2019 National Healthcare Retention and RN Staffing Report found that the first-year turnover accounts for 27.7% of the nursing turnover within US hospitals. By the end of two years, NGN turnover can increase to over 48% (Asber, 2019). Given the importance of nurse retention in terms of professional commitment, the safety of patients, team building, and fiscal responsibilities in healthcare, the concern for NGH should be addressed (Guerrero, 2017; Walsh, 2018).

Nurse retention is a growing concern for healthcare companies, given the recent pandemic climate, and nurse retention is in critical need (Ephraim, 2021). Organizations are looking to fill nursing positions with new graduates and may expect to continue dealing with shortages for the next decade (Friday et al., 2015). Nurse residency programs offer highly trained registered nurses prepped in didactics, simulation laboratory, and nurse preceptorship (DeGrande et al., 2018).

Concepts, Models, and Theories

The Plan-Do-Study-Act Model (PDSA) was introduced in the 1920s at Bell laboratories to implement and evaluate change processes. Widely used in health care for quality improvement projects, the four-stage PDSA model will frame this project. Table 1 depicts the components of the model and how they align with the project.

Table 1*PDSA Model Alignment with Project*

Cycles of the PDSA Model	Alignment
<p>Plan – Assemble a team and explore the following questions:</p> <ul style="list-style-type: none"> • What are we currently doing? • How do we do it? • Who does it? • What is done well? • What could be done better? 	<p>A large healthcare company has an NGN residency program designed to train new nurses for the hospital environment. The nurse is vetted from recruitment and interviewed by hospital management. The participants start didactic education for six weeks and then do a week of simulation training where simulated codes are offered for training purposes. The NGN residency s will take an exam at the end of the train and then start at the hospital for six weeks three twelve-hour shifts with the same preceptor. Every week the new NGN residency will have an assessment meeting with the preceptor and leadership for goals and milestone discussion. Recommendations have included: extend length of program, more computer education and application, and more patient experiences. The nurses should be taught whiteboards and personal connections with the patients.</p>
<p>Do – Implement a change</p>	<p>The NGN residency program is run by a sister company also under the umbrella of the same company. Feedback is provided to the NGN residency program's leadership, and more training for the computer system and patient experience is added.</p> <p>When NGN residency s want to move on for career advancement before the end of the contract, human resources place NGN residency in a specialty department such as critical care, emergency room, Cath lab, surgery, or mother-baby.</p>
<p>Study – Explore the following:</p> <ul style="list-style-type: none"> • Was there an improvement? • Was the plan worth the investment? • Do you see trends? 	<p>Data will be provided by the organization to answer the following project questions: Does the NGN residency program retention data in a large healthcare system meet or exceed identified retention benchmarks for the organization? What are the identified reasons for NGN residency participants leaving the organization after the first or second years of experience?</p>

<ul style="list-style-type: none"> • Were there unintended side effects? 	
Act – Reflect on plan and outcomes. Adopt change or go back to cycle 1.	Based on DNP project results, recommendations will be made to the organization.

Adapted from

<https://www.health.state.mn.us/communities/practice/resources/phqitoolbox/pdsa.html#d>

o

Relevance to Nursing Practice

Nurse Residency Programs are vital to keeping a pipeline of nursing talent to care for the patient population. Experienced nurses' applications are down, and in the year 2025, one million nurses are prepared to retire and leave the healthcare talent pool. The influence of Nurse Residency Programs on Retention prepares new nurses in evidence-based practice and supports nurses while gaining expertise and experience on the nursing units (Asber, 2019).

Nurse residency programs' success develops with proper leadership support and resources (Chant & Westendorf, 2019). Analysis of NRP revealed critical characteristics for success trained preceptors, dedicated mentors, a didactic component that involved socialization with peers, and correlated clinical immersion (Chant & Westendorf, 2019). Nurse Residency programs can increase retention for one year (Asber, 2019).

Interviews with over nine hundred nurses in fifteen hospitals highlighted five instrumental structures or processes (NRP). The five functions include evidence-based practice, preceptor coaching, clinical coaching examples, administration support for programs, and hospital-wide councils for professional training (Kramer et al., 2012). One

in three nurses leaves their first place of employment within the first two years (Walsh, 2018). The statewide Maryland Nurse Residency Program collective in 2014 saw a statewide six percent decrease in nurse turnover rates (Walsh, 2018). In a comparison study of sixteen articles on nurse residency programs, the retention rates one year later of participants ranged from 74% to 100% (Asber, 2019).

Local Background and Context

Prior to the hiring/onboarding freeze created by COVID-19 (from June-November 2020) the organization's primary pipeline for onboarding new staff was through the residency program. Previously, first year turnover rates had been as low as 5% in some facilities. After resuming operations, market factors adjusted the priorities and competition for newly graduated nurses. In turn, corporate recruiting strategies were on a learning curve as never before seen for this target market. Now strategies introduced to obtain staff accordingly (provisional hires prior to NCLEX testing, bonuses, loan payment assistance, etc.) have helped to make our company competitive in this arena again. This offers us the opportunity to have the most well-prepared and talented first year staff join us.

The need for a robust and nimble residency program to continue growth within the organization is critical. The organization's residency program has faced a current turnover rate of 46% along with a 180-degree shift in its program constituent's priorities. Staff have seen professional burnout and compassion fatigue much sooner in their careers than ever before (ANPD, 2021) and have long needed a nurse-centered approach. Changes in the residency program curriculum have included an evidence-based

curriculum that participants complete independently, 1:1 mentoring, coaching and career assistance and timely prepared topics of the participants 'choosing offered each month virtually at their convenience.

Role of the DNP Student

My role in this project is to evaluate the organization's current de-identified data that answers the project questions:

- Does the NGN residency program retention data in a large healthcare system meet or exceed identified retention benchmarks for the organization?
- What are the identified reasons for NGN residency participants leaving the organization after the first or second years of experience?

Summary

Nurse residency programs supported by leadership include didactic, simulation, preceptor coaching, professional practice councils, promote peer collaboration, influence nurse retention, and are cost-effective. Section 2 introduced the PDSA model framing this project, the evidence supporting the project questions, the context and background for the project and my role in planning, implementing, evaluating the project. Section 3 will discuss the sources of evidence that will be used to analyze and synthesize the project results. The plan for disseminating the results will be discussed.

Section 3: Collection and Analysis of Evidence

Introduction

Nurse Residency program focus is nurse retention and the hospitals have allotted funds to enhance new graduates didactic, lecture, and entire experience. The new graduates experience is enhanced with latest technology, nurse centered, and mentoring. The latest technology in simulation laboratory provides an environment where nurses can practice challenging situations without actual harm to patients (Tang et al., 2019). The simulation laboratory utilizes artificial intelligence in mannequins to interact with new graduates for real life cultivated situations (Tang et al., 2019). Challenging situations with lack of staffing, young patients' deaths, and fear of becoming ill has taxed our registered nurses.

New nurse's retention rate has been affected prior to the pandemic the rate was five percent and now the turnover rate is forty-six percent. Professional burnout and compassion fatigue because of the pandemic have highlighted these challenges. Nurse residency program offers mentorship, one on one support, and teaches resiliency. Nurse residency programs are focused to retaining new nurses and the strategy allows increased support, funds, and opportunities. The purpose of review of the NGN residency program is to evaluate if the program meets or exceeds identified retention benchmarks for the organization and to identify the major reasons from de-identified exit interviews with NGN leaving the organization for year one and year two.

Practice-Focused Question(s)

The practice questions are:

- Does the NGN residency program retention data in a large healthcare system meet or exceed identified retention benchmarks for the organization?
- What are the identified reasons for NGN residency participants leaving the organization after the first or second years of experience?

Sources of Evidence

Evidence supporting the importance of nurse residency programs will be explored. Walden University library's online databases CINAHL Plus with full text, Embase, ProQuest Nursing and Allied Health, PubMed, and Google Scholar will be used to explore the evidence supporting the importance of nursing residency programs. Keywords for the literature search include nursing attrition, nurse residency programs, new nurse residency programs, novice nurse residency programs and nursing retention. Sources of evidence will be peer-reviewed articles published in English within the past five years.

De-identified data from the organization leadership will include cohort data from NGN residency cohorts for the past two years and de-identified data from exit interviews of NGN residency participants who left the organization after year one and year two.

Protections

The site approval for a quality improvement evaluation DNP project will be signed by an authorized organization leader and submitted to Walden IRB with the request for IRB approval. Upon IRB approval implementation of the project will begin. De-identified data will be stored in a password protected computer accessed only by me for five years.

Analysis and Synthesis

Data will be analyzed using descriptive statistics to explore if retention of NGN residency participants met or exceeded identified benchmarks for identified organization retention benchmark. De-identified data from exit interviews of NGN residency participants who left the organization after year one and year two will be analyzed. Data will be reviewed, and counts will be made to identify the top five reasons nurses left the organization. Results of data analysis and identified reasons will be shared with organization leadership and recommendations for any changes provided.

Summary

Section 3 included a discussion of the plan for collecting, analyzing, and synthesizing the de-identified data provided by the organization. The participants who will be included in the dissemination presentation were identified. Section 4 discussions will include findings, implications, and recommendations.

Section 4: Findings and Recommendations

Introduction

The gap in practice was the lack of evaluation data from the NGN residency program for 2020 and 2021. The purpose of this project was to evaluate the retention data and identify the participants' reasons for leaving the organization. The project questions were:

- Does the NGN residency program retention data in a large healthcare system meet or exceed identified retention benchmarks for the organization?
- What are the identified reasons for NGN residency participants leaving the organization after the first or second years of experience?

The project questions explored nurse retention with the nurse residency program and the reasons why they decided to leave the organization. The nurse residency program provides the NGN with a safe environment to practice nursing skills and critical thinking. The NGN in residency programs utilizes simulation laboratories with real-life scenarios of patients' medical needs. NGN practice code blues, rapid responses, and navigating patient care with no ability to harm or upset any patients. NGNs are learning skills without the pressure of real-life consequences. NGNs also shadow nurses on the unit with patients and are able to question and rely on the nurse preceptor for guidance. Once completed, the NGNs are ready to practice in the nursing unit with enhanced confidence from the nurse residency program. After completing the nurse residency program, the NGN is a highly desirable candidate for the other hospitals in the area. As a result, the

NGN is often recruited to other hospitals with attractive offers such as bonuses, higher pay rates, and student loan payoff benefits. As a result, the local organization often does not receive its return on its investment as the NGN may decide to separate from the organization.

Findings and Implications

De-identified organization data was provided for this project. The total number of NGN residency participants for the system in 2020 was 586 and 680 in 2021. Year one 2020 cohort retention was 539 (92%). Year one 2021 cohort retention was 625 (92%). The residency coordinator reported that data for second-year retention is not collected, but that total nursing turnover for the system in 2020 was 37.4% and in 2021 29.2%. (Table 2). The residency coordinator reported that the primary drivers for residency attrition identified by participants during exit interviews were:

- Pay
- Better Working Conditions/Ratios/Career Autonomy
- Personal Reasons (family obligations, illnesses, childcare, work/life balance)
- Relocating
- Could not handle the demands of the profession

Table 2*NGN Residency Program*

Year	NGN Residents	Year 1 Retention	Year 2 Retention	Benchmark	Total Turnover
2020	586	539 (92%)	Not collected	None	37.4%
2021	680	625 (92%)	Not collected	None	29.2%

Recommendations

Although NGN retention after year one was strong, recommendations to the organization included addressing how to help NGNs handle the ever-changing demands of the profession as well as the pay and working conditions within the organization. Retention data should be collected annually and compared to national NGN residency data. Benchmarks for the NGN retention should be set by the organization. Feedback from participants should be used to support commitment to the organization. NGN residency participants as well as the mentors should be interviewed as part of a formative evaluation of the program.

Strengths and Limitations of the Project

The major strength of this project was demonstrated in the importance of NGN residency programs success rates. This strength is supported in the literature. Another strength is the organization who allowed this project to be completed. The organization leadership was not only willing to share data on the NLN program, was very receptive to suggestions for continued program evaluation.

Despite the strengths of the project, there are some limitations. Limitations of the project include the inability to interview current and past NGN residency participants in

order to explore both their positive and negative experiences within the program as well as during their first year as a graduate nurse. Additionally, another limitations included lack of data for second year retention data and available benchmarks for NGN cohort retention. Since year one retention data for both 2020 and 2021 was greater than 90% and greater than the total organization nursing retention data, the question remains: how many of these NGN were still employed at the end year two?

Section 5: Dissemination Plan

The dissemination of the plan is to present data results to the chief nursing officer and the executive nursing officer for nurse residency retention after one and two years. The first presentation of data collected would be unveiled to my chief nursing officer, division level, and corporate level. The audience would be from my direct chain of command in the nursing leadership field of a large hospital organization. The stakeholders selected focus on nurse retention and are actively strategizing for a solution to the nurse deficient in all areas of the hospital setting.

Analysis of Self

The experience that contributed to this project is my years of experience in the nursing field in different patient departments and hospital systems. As a practitioner, my registered nurse license has allowed me to work consistently during natural disasters, pandemics, and economic downturns. In every nursing role as a front-line staff or nursing leader, I was able to bear witness to the staffing challenges throughout my career. The need to retain nursing talents in the organization is essential for the future of healthcare, and as a scholar, I seek to improve nurse retention.

My ability to translate evidence for a practice change has developed. I am able to apply this knowledge to solve the nurse retention problem. The doctoral project is in the finalizing part, and the data supports the need for nurse residency programs as a tool to retain nursing talents. I have not only developed my ability as a nurse scholar, but as a nurse leader in supporting translation of evidence throughout the organization.

Summary

The doctoral project is a passion project for me, as nurse retention is essential to the safety and quality of all human life. I am incredibly grateful for the doctoral project journey and am excited to present the evidence and data collected that supports the nurse residency program to the large organization. I enjoyed the doctoral process, especially working with my chair and mentor, Dr. Whitehead. This relationship has been fruitful and rewarding during this process, and I have achieved a greater sense of confidence and success throughout the experience. I am also grateful to my mentor Dr. Krauser who was so generous with time and guidance. Dr. Krauser helped me develop professionally and have complete confidence to take leadership on projects. Inspiring and mentoring is a passion that I will continue to fulfill with colleagues and staff and encourage more nurses to pursue the Doctor of Nursing Practice degree.

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