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This doctoral project, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

Doctor of Nursing Practice

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College of Graduate and Professional
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Date: 03 / 10 / 2022

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School of Nursing

Revision of a Nurse Residency Program

A doctoral project submitted in partial satisfaction

of the requirements for the degree of

Doctor of Nursing Practice

by

Atalie Y. Henderson

April 2022

Dedication

I want to dedicate this project to my family and friends. They constantly supported me throughout this arduous program, which contributed to an achievement of a lifetime to remember. To the Connor, Howard, Pearse, and Henderson matriarchs, the intense tenacity has lit the path in advancement in this journey. To my sister Alicia Michelle, who has dedicated over 30 years to nursing, you started the journey for our generation. I had a unique feeling of gratitude to my deceased father, W. L. Henderson, who was my rock. The heartfelt memories kept me grounded. His words of encouragement throughout adulthood encouraged and instilled in me the tenacity to complete this lifelong goal (Psalm 37:25). I also dedicate the project to sister RNs who contributed their time to assist with research information without complaint, and I am forever grateful. The continued love, support, and encouragement were pivotal to completing this journey.

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Abstract

The organization that served as the study site for this project has two nurse residency programs that compete for resource allocation, space, informational materials, and human resources. The DNP project was conducted to combine the programs to eliminate waste and ensure the combined program met with the Commission on Collegiate Nursing Education standards for accreditation of entry-to-practice nurse residency programs. A literature review was used to evaluate practice themes for a formal residency program, and Benner's novice to expert theory was chosen to guide the program development. A team of nurse educators and managers met via teleconferencing to review the curricula of both programs and compare these to the best practice literature. The teams met over several weeks and achieved consensus on the structure and process for a single best practice nurse residency program. The project had the potential to provide a developmental framework for advanced practice residency and interprofessional trainee programs. Aligning the two programs assured best evidence-based practice and conservation of resources. The goal was to improve new graduate retention within an extensive federal system.

Keywords: new nurse satisfaction, BSN residency program recruitment and retention, baccalaureate nurse satisfaction, new nurse shortage, new nurse satisfaction, nurse turnover

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Chapter 1: Introduction

The purpose of this study was to provide a standardized workforce plan to improve the nursing graduate recruitment and retention rate. The development of a workforce plan can reduce the duplication of resources by standardizing program structure, process flow, and aligning resources (e.g., human, informational, material). This manuscript outlines the background, identifies the problem, reviews the literature, and explains the methodology to examine the retention and recruitment process for the Veterans Affairs Health Care System (VAHCS). According to Veterans Health Administration (VHA) Directive 1077, VHA nurse recruitment and retention decreased by nearly 60% over the last 5 years. The organization released research tabulated in VHA Directive 1077 showing an increased turnover rate for those 5 years. The shortage posed a significant challenge to delivery of quality care, especially in specialty areas, evident through 2020. The attrition themes identified were retention, recruitment, and an increase in retirement rates of nurses within the VHA, as the average age of a government facility nurse is over 50 years old.

The VHA commitment and policy directives mandate a nurse residency transition to practice (TTP) program for nurses with less than 1 year experience. The government facility is one of 10 VHA-accredited TTP programs. VAHCS implemented an evidenced-based practice nurse training program that met Commission on Collegiate Nursing Education (CCNE) and Office of Academic Affiliations guidelines. The program is operationalized through facilitators using a standardized curriculum specific to the medical center of training. The program includes didactic, simulation, and experiential clinical rotations to include specialty areas. The deliverables of portfolios, seminar certificates, evidence-based projects, and education campaigns are consistent with the strategic and operational plan of VAHCS. The initial effects

from VHA Directive 1011-39 (VHA, 2019) resulted in a slight increase in retention and recruitment but made little impact on attrition rates as the retirement of experienced nurses began to increase.

A standardized nurse succession plan allows for monitoring of resources and measurable outcomes related to retention and recruitment. As a high-reliability organization, VAHCS focuses on improved patient outcomes, elimination of waste, and improved efficiency (McCreight et al., 2013). This project focused on new nurse recruitment and retention to directly impact patient outcomes to ensure quality care and continued readiness (Ayanian & Markel, 2016). The scope of the residency program was appropriate enough to provide flexibility and anticipate organizational growth.

Statement of the Problem

The leadership team expressed a desire to align both programs to offer one best evidence-based practice residency and improve overall program outcomes. In the last 4 years, the organization has experienced wide gaps in its retention and recruitment of nurses, despite two separate nurse residency programs for new graduates (Veterans Health Administration, 2020). The organization has two nurse residency programs that compete for resource allocation in placement of full-time nurse trainees, space, informational materials, and human resources. Over the last 4 years, there have been fluctuations in the nurse trainees' recruitment and retention rates. As the shortage of registered nurses continues across the United States, recruitment and retention of new graduate nurses is more important than ever. The American Nurses Credentialing Center and numerous studies in the literature strongly support the use of nurse residency programs in supporting the transition of new graduates into the workplace and in providing them with the opportunity to learn competencies for specialized areas of nursing

(Kram & Wilson, 2016). Nurse leaders are often challenged with retaining quality nursing staff due to the increasing trend in bedside nursing turnover rates (Colosi, 2022). New nurse graduate 1-year turnover rates increase in the first year of practice and double by the second year, which poses a negative impact on patient outcomes (Ayanian & Markel, 2016). The cost of recruiting and onboarding a new hire is one-and-a-half times an experienced nurse's annual salary (Haddad et al., 2020). VAHCS turnover costs per nurse include medical benefits, vacation, sick time, and training, contributing to a negative variance per nurse.

VAHCS serves non-active-duty veterans on 84 acres and includes 10 outpatient community clinics, home health services, outpatient mental health services, and women's clinics. In a competitive market for the recruitment of new nurses, Veterans Affairs (VA) is proactively keeping up with the growing changes as a large care delivery provider by evaluating its nurse succession while remaining a competitive organization recruiter with eight medical centers in the surrounding Dallas–Fort Worth area.

The organization's two nurse residency programs compete for resource allocation and placement for full-time nurse trainees. VAHCS currently receives budgeted funding for nurse trainees from two fund control points. The first control point is locally allocated, and the second source is through a federal control point. In the study, I examined the current state of the two TTP programs: (a) one accredited postbaccalaureate nurse residency (PBNR) program for licensed nurses with no experience, funded by the national VA affiliate, and (b) the locally funded TTP program for the nurse with less than 1 year of experience. Both programs were developed as a means for nurse succession planning by VHA Directives 1077 and 1039 (VHA, 2019).

The total funding allocated for nurse trainees in the TTP and PBNR programs came from two different fund control points: local and national. Over the last 4 years, there have been fluctuations in the nurse trainees' recruitment and retention. The government facility turnover costs per nurse include medical benefits, vacation, sick time, and training, contributing to a negative variance per nurse. The leadership team expressed a desire to align both programs to offer one best evidence-based practice residency and improve overall program outcomes.

Purpose of the Study

The quality improvement plan aimed to align the two programs to assure best evidence-based practice, conserve resources, and improve new graduates' retention within an extensive federal system. Development of a standardized nurse trainee-to-practice work plan would allow a proactive approach to the anticipated increase in nurses lost to attrition and improve care outcomes for the health care facility, which was located in an urban area (Haddad et al., 2020). The project will improve the nurse trainee experience, provide systematic work processes, identify themes in recruitment and retention, and evaluate the success looking at future nurse turnover.

Nature of the Project

A well-developed program plan demonstrates a functional scholarly approach and an alignment with how the organization implements change. The federal system has a leadership style that requires a multileveled approach for the determination of final approval. Providing a project overview before starting is required per the organizational policy. The VA executive team consists of a physician and two nurse executives. One of the nurse executives was the program sponsor in anticipation of challenges and barriers that threatened to delay steady progression in completion. Once the executive team approved the project, the project was further

vetted through the system redesign program and institutional review board (IRB). The IRB advised if consent was required. Following the VAHCS policy, a project was then chartered. The charter covered the problem statement, business impact, measures, goals, milestones, and sustainability and kept track of milestones accomplished.

As the owner of this project, I led a workforce team that included the associate director of patient care service, a research nurse, the process improvement coordinator, the chief nursing officer of education, and program coordinators for the nurse entry-to-practice programs. The one accredited program has a standardized curriculum, and the other local program facilitates the program using topics recommended by the CCNE. The project was guided by these accreditation standards, representing the best in evidence-based practice (Veterans Health Administration, 2020). I prepared a side-by-side alignment of the two programs using the CCNE standards.

The group reviewed this document as a starting point for discussions on the alignment of curriculum, placement, simulation, and experiential experiences and to start the brainstorming and mapping process. The group used the Delphi method to achieve consensus (Humphrey-Murto et al., 2016). Once a consensus was achieved on the program's flow, structure, processes, and allocation of resources, the group worked to eliminate duplication and waste, and the team developed a monitoring tool. A standardized curriculum promotes fiscal transparency and stewardship of resources. The group also created a detailed evaluation plan that compared rates of recruitment and retention over time, evaluated effectiveness, and implemented and allowed for future improvements to the program (Meyer-Bratt, 2013).

The overall goal was to establish a combined work plan for the two entry-to-practice programs that tracked and trended new nurse turnover rates. A standardized method for nurse trainees captured the organization's return on investment and eliminated duplication in services

provided, such as didactic, simulation, and person-hours. The project initiative taken on by the health care organization supports the Institute of Medicine's (IOM) stance to propel competent BSN-prepared nurses into the workforce. Better support for the TTP can empower nurses to assume staff nurses' responsibilities, knowing they have the support of the residency program staff. A supportive environment prepares new nurses in a psychologically safe coaching environment to meet the changing complexity of care and to promote a climate conducive to enhancing recruitment and retention to decrease the VHA nursing shortage.

Research Question

In the study, I standardized two nurse trainee TTP programs.

Problem: The problem was a gap in retention and recruitment between two nurse trainee TTP programs.

Intervention: The intervention was a combined standardized process for the nurse trainee and other health trainee programs.

Outcome: The quality improvement project will increase nurse recruitment, retention, and allocation of resources for the nurse trainee TTP programs.

System Review Terms

The high-reliability organization (HRO) coordinator was consulted frequently for updates and feedback on data, monitoring, and review of the plan. The standardized nurse trainee TTP program requires a baccalaureate-prepared nurse in the first nurse role, and the program provides a year-long program of dedicated time for didactic, simulation, and experiential rotations in a four-phased program. The nonstandardized nurse trainee TTP program is a mandatory program for nurses at any level with less than a bachelor's degree and 1 year of experience. The program

provided 12 weeks of dedicated time for out rotations and didactic, after which the resident works in a staffing pattern.

After consensus was reached, the charter was reviewed with invited stakeholders to complete final edits and recommendations. Defining allows for the reexamination of how the process currently operates with brainstorming through mapping and fishbone analysis to visualize multiple participants' roles and processes. The data were collected to develop a sustainable concrete plan to track and trend effectiveness to eliminate duplication of similar vital elements (Gayed et al., 2013).

Chapter 2: Literature Review

According to the Bureau of Labor Statistics (2020), the United States will encounter a nursing shortage of 500,000 over the next 5 years. In response to the global problem of new graduate turnover, the Office of Academic Affiliations (OAA, n.d.) reported an increasing turnover rate the last 5 years for the VHA. The OAA, which is aligned under the Office of the Under Secretary for Veterans Affairs, estimated the turnover rate in the last 5 years to be \$2.52 million for implemented succession programs. These programs are inclusive of student nurses, new graduate nurses, and postbaccalaureate nurses. A literature review was performed to identify best practices to address the retention rates, resource utilization, and attrition due to retirement.

Literature Search Methods

The initial literature search was conducted through Abilene Christian University's library website. Databases searched included CINAHL, Medline/PubMed, and Cochrane. The inclusion search criteria included dates ranging from 2015 to 2019, peer-reviewed journals, and English full text. Broad search terms such as *retention* and *recruitment* were initially used, which yielded over 6,000 results. The search was then narrowed down to 260 reviews with the following terms: (a) *new nurse satisfaction*, (b) *BSN residency program recruitment and retention*, (c) *baccalaureate nurse satisfaction*, (d) *new nurse shortage*, (e) *new nurse satisfaction*, and (f) *nurse turnover*. The exclusion criteria were then applied using the following: (a) *evaluation of nurse resident*, (b) *residency program accreditation*, and (c) *nursing student evaluation of transition to practice*.

Kram and Wilson (2016) examined 334 novice nurses who entered a postresidency program for critical care, which resulted in a retention rate of 95% for over 1 year postresidency. The nurses reported benefits of the nurse residency program including increased job satisfaction,

increased self-confidence, and decreased turnover. Like the nurse trainee TTP programs offered at the VA, the nurses transitioned from room instruction at the residency's 20th week.

Smith et al. (2016) conducted a systematic review study among 336 hospitals that offered nurse residency programs. Out of 336 hospitals surveyed, 45 offered 12-month nurse residency programs. More than 50% of the residency programs were internally developed, and the remainder outsourced through a vendor. Vendors listed were CCNE accredited, with the length of the programs ranging from 6 weeks to 72 weeks. The study's limitations did not include the recruitment rates postresidency and had a low survey response rate at the end of the program from nurses. Overall, the study showed a lack of consistency in the standardized process for residency programs and financial resource challenges due to a lack of funding.

The IOM recommended that all nurses have a BSN by 2020 and suggested implementing nurse residency programs due to evidence of declining nurse retention rates and stressful working environments (Eckerson, 2018). Eckerson (2018) reviewed 12 articles and analyzed them using the John Hopkins Evidence-Based Practice (JHEBP) Appraisal Tool. I decided to include this study because it supported the nurse residency selection requirement consistent with the VA model. This selection criterion of less than 1 year of postbaccalaureate nursing experience reflected on the perception nurses had of the program, which influenced the findings. The literature review revealed a strong connection with nurse residency programs and increased nurse retention rates among nurses in the initial 12 months of hire. As a result, the positive financial impact saved most facilities a significant amount of money on replacing and retraining nurses (Ayanian & Markel, 2016). Moreover, newly graduated nurses may be more inclined to apply to a hospital offering a nurse residency program due to positive outcomes.

According to Goode et al. (2018), research has shown a structured nurse residency program creates better learning and improved organizational embeddedness, thereby positively influencing the nurse decision to remain employed. Accreditation of the nurse residency program from OAA provides financial support for sustaining the nurse residency program. According to Franquiz and Seckman, (2016) conducted a quality improvement project to assess organizational readiness for accreditation. The nurses' professional development in this study was evident through project findings that surveyed nurses and hospital administration. The view on accreditation standards was described as logical, legitimate, and consistent with its mission and value (Franquiz & Seckman, 2016). Gaps identified were regarded as minor, such as restrictions to eligible employees and the implementation of self-study curriculum. Accreditation standards require a minimum degree level of a bachelor's degree. However, the current CCNE requires programs service all newly licensed nurses regardless of their nursing education level. The VA has two entry-to-nursing trainee programs, and while one of the entry-to-nursing programs requires a minimum of an associate degree, federal funding is higher for baccalaureate-prepared nurses. The study identified favorable findings, departmental leadership, and support from executive nursing leadership as key to the successful transition of the new nurse into practice.

Van Camp and Chappy (2017) performed a retrospective evaluation of several nurse residency programs for over 10 years. The implications of success in nurse satisfaction showed an increase in retention supported future developments of nurse residency programs in other specialty areas. Further review of this article outlined a thematic approach to examine the graduate nurse residents' perception before starting the program and after completion. The comparison was between the new graduate nurses who participated in a residency program and those who did not participate in a nurse residency program. Nurse satisfaction was the primary

focus, and retention rate was compared with new graduates who did not participate in a nurse residency program. A mixed-methods approach was used by identifying qualitative themes that were assigned a Likert score. The article reviewed utilized a Likert scale, translated the Casey–Fink scoring tool, demonstrated satisfaction in the area assigned, and revealed retention rates. Retention rates were analyzed at 1, 3, and 5 years for quantitative outcome measures (Van Camp & Chappy, 2017) that aligned with this quality improvement project’s desired outcome. The authors demonstrated the support of a nurse residency program to capture the experiences of a nurse resident. In summary, the approach evaluates themes from authors’ reports on several nurse residency programs over time to address nurse retention. The qualitative variable of nurse graduate programs measured nurse perception, and the quantitative variable monitored retention. Furthermore, the findings supported the new graduate training program to close the practice gap and improve readiness for the nurse to transition to the role of professional practice and improve retention.

The strengths further validated that an accredited nurse residency program plus strong organizational support improved patient outcomes and nurse satisfaction. The program highlighted a curriculum to showcase nurse competency that has developed the nurse confidence level. Overall, nurses who have completed a nurse residency program are more likely to be recruited and retained by the employer. In conclusion, the article supported implementing a nurse residency program for both baccalaureate-prepared nurses and new graduates. The residency program was implemented to address the increase in turnover rates and the current nursing shortage.

Contrary to Van Camp and Chappy (2017), who examined private hospital nurse residency programs, Oblea et al. (2019) focused on a demographic population of nurse graduates

that consisted of active-duty and civilian new nurse graduates in a clinical nurse transition program at U.S. army hospitals. The authors performed a pre- and poststudy of graduate nurses who participated in a military nurse residency program. The statistics examined the qualitative measures of nurse readiness for practice. Nine military nurse residency programs were surveyed, and 92 pretest surveys were mailed. The return response rate was 93.4% (86/92) from eight nurse trainee program sites. The article sampled 86 participants; all 86 successfully returned their posttest survey. The advantage was the study's strength and a setting like the project setting (a military hospital). The advantage was that army-based hospitals serve veterans, families, and enlisted personnel.

Weaknesses noted were participants' racial and gender bias, with a median age of 23 years (Oblea et al., 2019). Additionally, most participants had time commitments related to enlistment status, which challenged the actual retention rate. The retention rate accuracy had the potential for an enlistment commitment and not the nurse residency transition program's satisfaction. The potential gap between enlisted and active duty did not provide enough evidence to ensure adequate staffing. The findings supported the practice of a combined enlisted duty nurse and civilian residency program.

Nash et al. (2018) reviewed three training programs designed to address the growing organizational nursing shortage. The authors emphasized the 2019 legislative mandate that allows veterans to receive care from their chosen facility. The program implementation of a nurse residency program supported the need to train nurses in anticipation of the increasing complexity of the veteran population in North Carolina. Like the VA nurse trainee programs, the nurse residency programs were established through national and local funding from OAA in partnership with 15 university affiliates. The authors summarized a 5-year retrospective analysis

that examined three nurse programs (student nurse, baccalaureate-prepared new graduates, and advanced practice nurses for mental health). The framework was implemented in a VA nurse academy with the following goals and objectives:

1. Develop veteran-centric curriculum in academics.
2. Increase student enrollment.
3. Promote VA faculty and professional development.
4. Increase recruitment and retention of VA nurses.

This study's strengths were a postbaccalaureate nurse residency that was later accredited and federally funded through 2012, supported by the Under Secretary of Veterans Affairs. This program also had an advanced practice residency to meet the mental health demands of this vulnerable population. However, the authors failed to document specific data or describe how program goals or objectives met the desired outcome. The procurement of additional funding was rewarded based on program reviews. The authors did not identify a theoretical framework or plan for sustainability.

Gaps identified showed an inability to demonstrate how resources were leveraged to sustain and support three separate training programs with 15 partnerships. The author omitted to mention the future after accreditation and to define, measure, analyze, improve, and control resource utilization for nurse recruitment and retention programs (Robinson et al., 2018). The study was very similar to the project practice area with implementation of a nurse residency program in anticipation of the increasing complexity of veteran care, the nursing shortage, and an aging workforce (Nash et al, 2018). The authors captured the growth in the veteran population community. According to the Bureau of Labor Statistics (2020), data collected regarding care received revealed that there would be a long-term impact on over 500,000 nurses eligible for

retirement. The authors were astutely aware of the importance of the VA's TTP programs to attract a new generation of VA nurses. The authors approached the qualitative study by interviewing leadership and program directors to identify barriers for successfully implementing the nurse transition programs from a resource utilization and evaluation perspective.

The authors did not describe the conceptual model or identify a working framework; however they discussed a nonresearch approach for data collection using a qualitative survey from a scripted interview tool. The interviews and scoring tool obtained from the nurse residency program were subjective and allowed directors to identify barriers to implementing a nurse residency program. The authors surveyed 19 VA TTP programs, and the tool was provided as a table for review. The facilities ranged in size. The common theme was the 3 to 4 years of service for the program coordinator and previous participation in the pilot program before implementation. The themes highlighted resources, evaluation tools, materials, program support, and retention plans. In contrast, the authors did not provide a framework or conceptual model of the nurse transition program. The conclusion was vague in future opportunities and how best to meet the future demands proposed in implementing the program. The program mentioned the mandated VHA directive demonstrating the program needs but did not outline a clear, concise plan for sustainability in ensuring resources, interpretation training for evaluation, program coordinator training, or how both programs could cohesively function together. The article did not provide information as to how two TTP programs could maintain quality outcomes while run separately. The strengths of having separate programs were specific to enhancing retention of new graduate nurses and meeting 80% of the BSN initiative by 2020. Although the authors described separate transition programs, they did not delineate program or clinical outcomes for the separate programs.

Implementation of a nurse residency programs provides a safe training environment and leveled progression to build confidence in a supported and structured care environment with appropriate supervision. Peltzer et al. (2018) conducted a cross-sectional study in which over 1,000 nurses discussed leadership roles, opportunities, and goals. In a nurse's response to the study, the surveys supported the resident's interest in their knowledge of leadership skills to serve on committees such as the state boards. The purpose of this study was to explore a nurse's desire for a leadership role. Whereas Peltzer et al. (2018) focused on nurse residency programs for nurses in the acute care areas, Staci et al. (2014) and Larsen et al. (2018) conducted studies of new graduate nurses' residency transition to nursing practice programs in the field of community and public health. Key elements in this study included general orientation, preceptors, case studies, and peer support.

Weaknesses in this study revealed a lack of data regarding how long nurses were retained in the postresidency public health setting. Strengths noted in this literature review emphasized community health, resource utilization, and nurses' role in public health. The external stakeholders in this article included refugee organizations and rescue shelters. Overall, Larsen et al. (2018) found that with increased support from the veteran nurses, intentional education such as the nurse residency program was able to attract and retain new graduates. In contrast, the study conducted by Staci et al. (2014) yielded a low placement rate in the rural setting and more lucrative job offers in the hospital setting. Most candidates expected job offers postresidency, but due to budget constraints, offers were scarce. Weaknesses in this study were limited sample size due to the community's minimum availability of resources.

Jurchak et al. (2017) studied a conventional content analysis for acceptance into a clinical ethics residency for nurses (CERN) program. Instead of an interview phase, the review of 67

essays submitted for a nurse residency program determined acceptance. This process was influential in determining the appropriate candidates for the program. The nurse residency studied by Jurchak et al. (2017) focused on nurses' ability to navigate through ethical issues in the nursing practice and determine the appropriate course of action. Limitations of this study revealed gender bias. The sample lacked gender, race, and diversity essential in a nurse residency program focused on ethical dilemmas in the health care organization. The findings revealed a desire for colleagues' support in their ethical decision-making overall, providing quality patient care.

Like Peltzer et al. (2018), Al-Dossary et al. (2016) examined a cross-section design involving a convenience sample of 98 new graduate nurses from three hospitals in Saudi Arabia. The researchers looked at leadership skills with descriptive analysis to explore linear regression. They found that implementing the leadership component increased the hospital retention rate by 26% compared to the period before implementing it. The 5-point Likert scale was used to assess the clinical leadership skills survey provided to the new graduates in this study. The respondents' answers ranged from 1 = *rarely* to 5 = *almost always* during their experience in the nurse residency program. The responses addressed five leadership practices: clinical expertise, effective communication, collaboration, coordination, and interpersonal understanding. The results indicated good reliability for the selected instrument used in the leadership study.

The longitudinal studies were conducted by Bratt et al. (2012) and Slate et al. (2018). Bratt et al. (2018) explored program outcomes for nurse residency programs in Wisconsin that foster TTP programs in nursing. This study captured a longitudinal design inclusive of 382 urban and 86 newly licensed nurses. The nurses participated in a 12-month residency program. Data collected were at the beginning of the program, middle, and end. The results of this study

revealed that nurses in this setting had higher job satisfaction. Like the VHA PBNR system, the Wisconsin program was federally funded and delivered to nursing residents in conjunction with academic partnerships.

Outcome variables for this study included decision-making ability, job satisfaction, stress, and organizational commitment. Bratt et al. (2012) found that although stress levels were low for rural nurses, overall lack of committed preceptors negatively impacted rural areas' ability to recruit and retain new nurses. Less critical patients were in rural areas versus urban areas, thus contributing to higher job satisfaction and lower stress rates.

Slate et al. (2018), looked at how the data collected were examined to improve the novice nurse experience. This article supported the novice nurse in dealing with challenges and thinking critically during the high-leveled competency of a structured orientation program such as a nurse residency program. The participants selected responded using demographic tools such as the McCloskey/Mueller Satisfaction Scale and another scale used by the VA called the Casey–Fink Graduate Nurse Experience Survey. The study determined a positive impact of a nurse residency program is essential in nurse retention. Recommendations for changes in the practice were noted to improve communication, clinical deterioration, and obtaining of quality preceptors.

Kwok et al. (2016) sought gaps within nursing collective agreements to sustain nurses within the workforce in Canada. Nine major collective agreements for registered nurses were analyzed. Findings demonstrated five areas of practice, such as mentorship opportunities from eligible retired nurses, attracting internationally trained nurses, implementing operational changes to improve process flow, and implementing flexible work schedules. The strategies recommended in the literature supported various methods to retain nurses in a competitive labor market.

Edwards et al. (2015) conducted a systematic review to determine the effectiveness of retention strategies for new graduate nurses in the United States. A total of 8,199 studies were identified in the literature review, but only 30 met the inclusion criteria. The selection criteria for this study consisted of all quantitative study designs to determine the effectiveness of the support strategies currently in place. Overall, the articles reviewed resulted in high retention rates, between 73%, and 94%, reported at 1-year postresidency.

McDonald and Ward-Smith (2012) conducted a systematic review to examine the evidence for nurse retention and evidence-based strategies to enhance retention. The sample size consisted of 265 articles selected from different databases. This study's key search words included *research, interventions, evaluations, retention nurse, and graduates*. The researchers found that factors that facilitate retention among new graduates include job enjoyment and high job satisfaction levels. This study's limitations suggested implementing a nurse residency program by the American Association of Colleges of Nursing but did not include retention factors such as post-nurse residency as an inclusion search when selecting articles for this review. Furthermore, the study revealed that more extended preceptor programs up to 12 months were associated with higher retention rates. Nonetheless, according to McDonald and Ward-Smith, all preceptorships were shown to increase retention rates regardless of the length.

Blegen et al. (2017) explored a secondary analysis of data collection in a TTP study with a retention rate of 1,400 nurses employed by 97 hospitals nationwide. The goal of this study was to examine the relationship of newly licensed registered nurses employed in hospitals. Limitations of the study were merely based on voluntary surveys completed. The study differentiated between magnet hospitals, nonprofit hospitals, private sectors, and government

agencies. The high retention rates were supported in magnet hospitals versus rural settings. The findings demonstrated a retention rate of at least one year for 83% of nurses.

Theoretical Framework Discussion

The theoretical model guiding the project was Alexis Donabedian's model of structure–process–outcome (Ayanian & Markel, 2016). The group examined both programs' structure, which refers to the curriculum, staffing, financial and reporting requirements, and the program maps. Process refers to how the program is delivered, the role of the various preceptors and their training, the experiential activities, and other variables such as mentorship and peer support. The two programs were aligned within Donabedian's pillars of quality improvement.

Conceptual Framework

The VA has adopted a value system of continued readiness and systems evaluation from root cause analysis (RCA) previous practice to the theories present in a high-reliability organization. The recent change to a state of continuous readiness thorough evaluation of risk and frequency is structured using toolkits developed from Lean Six Sigma (LSS). This process was initially developed by the car company Toyota to evaluate quality improvement and eliminate waste through changes that add value to the customer (Gayed et al., 2013). According to the US Department of Veterans Affairs (see Figure 1), RCA looks at cause and effect but does not support a continued readiness organization. Hence the switch to LSS as a theoretical framework for quality improvement. The lean process and the sigma process are combined in this project with approval for use obtained in faciality IRB and work without compensation agreement.

Figure 1*DMAIC Roadmap*

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The first step was the completion and approval of a charter. The charter was submitted for approval by the director and chief nurse officer (CNO). The charter included an outline of the stakeholders, executive sponsor, description of the problem, the business impact, project scope, measures, goals, and communication plan. Once approved, the designated chairperson set an initial meeting. Any changes were then outlined in a systematic interrelated process to analyze how steps were connected using the DMAIC. This process is an acronym for improvement methods to *define*, *measure*, *analyze*, and *control* change, which occurs on multiple levels. This method of quality improvement aligns mostly with the RCA. The advantage of the DMAIC is that it promotes a phased approach to eliminate waste, evaluate processes, and eliminate rework by establishing a clear-cut method. This process allows for a measurable evaluation process to

promote a review of quality improvement from beginning to end (Gayed et al., 2013), thus creating the opportunity to anticipate access, flow, throughput, and for the end user. The impact is to eliminate waste and improve customer service (McCreight et al., 2013). During the RCA's initial review, there were opportunities for recommendations for revisions of the charter and discussion anticipating deliverables in the form of tollgates for each phase of the process change.

Summary

In conclusion, the literature supported TTP programs to improve clinical outcomes and clinical practice. These programs address new graduate nurse turnover, retention, recruitment, and satisfaction. This quality improvement project aimed to develop a work plan to support the nurse trainee TTP programs to leverage resources to eliminate gaps in training and improve overall recruitment and retention. This process would allow the evaluation of one cooperative program and ensure the monitoring of retention rates.

Chapter 3: Methodology

In anticipation of the changing complexity in health care and an increase in nurse demand over the next few years, nurses need to be equipped to develop a more comprehensive knowledge base that addresses quality outcomes and resource management through the development of more effective skills (Chism, 2016). This chapter describes the project design and the methodology used in the study. Two residency programs currently exist, creating a challenge in maintaining adequate nurse recruitment and retention in a government health care system. The two programs compete for human and financial resources and have varying success rates with retention.

Purpose

The leadership team expressed a desire to standardize the nurse trainee TTP programs to ensure equitable leveraging of program resources. Implementing the change aligned with the organization's strategic and operational plan to eliminate waste, leverage resources, and promote fiscal stewardship. In this study, I examined the relationship between the two programs and compared them to the literature and CCNE standards to optimize quality training, eliminate barriers to patient care, and ensure equitable training for newly hired nurses.

Project Design

A retrospective assessment and review of the last five cohorts of the standardized and nonstandardized programs concluded the relationship between the two groups. The facility made temporary changes to the program to accommodate onboarding that resulted in the local trainee group being hired directly for staffing. The national group continued in the structured didactic and simulation during the pandemic. Data analysis allowed evaluation of data trends to present to the executive sponsor, system redesign team, and executive leadership. A process map and

DMAIC demonstrated areas of duplication and process overlap and included feedback from interprofessional stakeholders (human resources, nurse managers, and program coordinators). I examined leveraging resources by tracking recruitment, retention, attrition rates and eliminating duplication of efforts. In addition, the process demonstrated efficient management of resources of the nurse trainee programs and tracking for retention and recruitment.

The quality improvement project followed the government facility implementation process to align the two nurse residency programs. The DMAIC (see Figure 1) ensures a systematic method for best practices, conserving resources, and analyzing the two trainee programs. The project used a retrospective cohort design to review the recruitment and retention rates of a standardized nurse residency program, and a nonstandardized program proactively anticipated the increasing complexity predicted for the governmental health care population.

Methodology Appropriateness

I used the DMAIC process to evaluate the change for a standardization of the nurse trainee TTP programs to identify trends, cause, effect, and bottlenecks that limit quality improvement using a theorist approach modified and adopted by Alexis Donabedian (Ayanian & Markel, 2016). In addition, I conducted meetings with stakeholders to obtain feedback and consensus captured through electronic minutes using Microsoft teams. Meetings were virtual due to busy schedules and the limitation of social distancing because of the COVID-19 pandemic.

Feasibility Appropriateness

Government leadership has expressed a desire for this project in accordance with their overall quality improvement and nurse retention efforts. A provisional charter for the DNP project was submitted July 2019 with a green belt sponsor approved through the associate director of patient care services. Thus, the project was feasible within the time frame of the DNP

program. In addition, I worked in the education department and had knowledge of processes, access to key stakeholders, and access to the data.

IRB Approval and Process

The project used data, not human subjects. However, an IRB application is required for academia and government organization evidenced-based projects. In anticipation of the IRB process, a provisional charter for the DNP project was presented, assigned a green belt sponsor, and approved by the facility director of patient care services, who followed the project to completion. IRB approval for the facility was granted on May 4, 2020, and by Abilene Christian University on October 12, 2021.

Interprofessional Collaboration

The project workforce team included the associate director of patient care services, a research nurse, the process improvement coordinator, the chief nursing officer of education, and program coordinators for the nurse entry-to-practice programs. These team members used the Delphi approach to achieve consensus. Meetings were primarily virtual due to busy schedules and the COVID-19 guidelines. While team members' names were used internally, they are not be used in the ACU manuscript.

Practice Setting for Evidence-Based Practice (EBP)

This project's setting was the main campus of a designated Level I government health care system located in an urban area. The government facility served multiple Texas counties and two Oklahoma counties and had an academic partnership with two local universities. The research facility provided wide-ranging health services through primary, tertiary, and long-term care.

Target Population

The target population focused on the pipeline from academic affiliates who entered one of the two nurse trainee TTP programs.

Risks

There were several formal meetings with the organization regarding the project's nature. Both the VA and the ACU IRB concurred the project met the standard of quality improvement. The discussion was ongoing regarding the project's nature and desired outcomes that met scholarly and facility rigor. The organizational concerns were discussed with the mentor, academic chair, and facility-assigned green belt. A mutual agreement to meet the stakeholders' concerns regarding resource utilization was addressed in a preliminary charter using mapping of the DMAIC to capture the change process and removal of the facility name. COVID-19 threatened the timeline and delayed the IRB process.

Benefits

A preliminary charter was developed to ensure support and buy-in of administration, resulting in assigned stakeholders. A preliminary charter was developed outlining stakeholders early in the process and a list of needed human resource specialists, nurse recruiters, and nurse managers. Identifying the stakeholders early in the process set the tone for meetings, expectations, input, and direction to ensure project success.

Instrument/Measurement Tools

The instrument used for the project followed the organizational change process and used the DMAIC. The DMAIC is a systematic technique in LSS that can capture the fiscal advantages of both programs and demonstrate alignment of program resources and schematic mapping of the nurse residency programs. A letter was sent requesting the use of the DMAIC tool. The

organization publishes a facility-specific training manual on obtaining permission for sending emails to the government facility privacy officer, medical media, and system redesign coordinator to request the use of the LSS model.

Data Collection/Management

I sent a letter of inquiry for use of cohort data related to the cohort recruitment and retention information stored in the government database. A response stated that permission requires proof of facility IRB application approval. Ongoing meetings with the project chair and IRB committee of the university clarified the project was a quality improvement and practice area, so facility IRB guidelines would suffice. No identifiers were used for this project. Data collected during this project were stored in a secure university Google drive. Deidentified data collected during this project were stored in a secure university drive under the project researcher's name. Data were owned by the university in case access is needed at a future date. The storage system was provided by the online graduate school for doctoral student research data, supported by the university's IT department for security purposes, and kept for the minimum required time according to IRB guidelines.

Timeline

The timeline of events illustrates the coordination and planning necessary to ensure the DNP project's successful implementation (see Table 1).

Analysis Plan

The timeline of events illustrates the coordination and planning necessary to ensure the DNP project's successful implementation (see Table 1). Completing a standardized nurse trainee TTP program in a government facility should increase recruitment and retention at one and three years.

Table 1*DNP Project Timeline*

Date of activity	Project activity
July 2019	Preliminary meeting with executive leadership for topic Executive sponsor and green belt assigned Developed PICO question Facility mentor assigned
August 2019	Initiated affiliation agreement between university and facility Facility preliminary charter developed for facility review
September 2019	Project work group with stakeholders outlined per charter
October 2019	Final PICO Literature review draft Chair and committee selected
January 2020	Completed the NIH Human Subjects Protection Training
February– April 2020	Presented project idea to key stakeholders assigned via charter Selection of new committee member related to staffing assignment
May 2020	Chair changed related to staffing assignment Contact with new assigned chair ACU signed affiliation agreement/facility clearance pending
June 2020	Miniproposal development Communication and conference with new chair Miniproposal submission Approval of miniproposal July 30th
July–August 2020	DNP miniproposal sent and approved by chair Phone conference with new chair Meeting with leadership team regarding project deliverable items Mentor oversight assigned with weekly meetings recommended Mentor amenable to Friday and Saturday, 10:00–16:00, weekly New chair and committee form pending emails sent
September– October 2020	DNP partial submission evidence of accomplishment in course chapters 1–3 DNP project I class in progress Tutor.com, a writing review platform for review of draft feedback Corrections made per faculty and writing resource chapters 1–3 Request for miniproposal defense sent to committee; 2/3 responded pending Typhon log review by 752 faculty Awaiting approval to proceed with IRB process Defense PPT development Typhon and Canvas overview of required documents for 752
November– December 2020	Complete IRB Continue communication with chair Continue meetings with organizational assigned workgroup Committee members changed by administration; awaiting Zoom conference with chair (tentative date, January 15, 2021, pending response from third member)

Chapter Summary

The quality improvement project streamlined the facilitation of the residency program using a theoretical framework that aligns with clinical practice and supports process change for implementation to identify patterns in the recruitment and retention programs. The methodology aligns the PICOT (*plan, intervention, comparison, outcomes, and time*) development of a scholarly project with successful implementation and monitoring in a government facility (Deblois & Lepanto, 2016). The project's success requires continued prioritization, ongoing planning, and supportive feedback from the project chair, and committee.

Chapter 4: Results

The purpose of this scholarly project was to align the resources of the facility's two RN residency programs and to ensure that the combined program was up-to-date with the evidence-based literature. The overall organizational goals of this project were to improve new nurse recruitment, nurse retention, and the efficiency of the transition program. An expert team utilized the facility's LSS process to analyze the program's infrastructure. The team revised the process for facilitating the program to enhance program quality, monitoring recruitment and retention, and resource utilization.

Project Design

The PICOT format focused on identifying gaps, duplications, and revision of the infrastructure of two nurse trainee programs to improve nurse recruitment and retention rates. The COVID-19 pandemic restrictions shifted the team's work to an online video work mode, focused the updated program toward a combined virtual and simulation program, and added a Covid education program. The program development team used evidenced-based LSS framework mapping to revise two nurse trainee programs.

The setting for implementing the project was a prominent Texas government hospital. The expert team comprised two nurse trainee program residency coordinators, a program director, and a designated learning officer for in-hospital education. Due to COVID-19 restrictions, the workgroup met eight times virtually to map essential program tenants and recommend the new program infrastructure. Side-by-side analysis of the two programs provided a collaborative environment for all nurse trainees from novice to expert, maintaining a standard for teaching strategies in didactic, experiential activities, and simulation to adhere to program funding and accreditation standards.

The organization utilized high-reliability principles and impact change using the LSS model. Although traditionally found in industrial operations, the model has proved effective in health care to eliminate rework, improve efficiency and productivity, and eliminate waste. The model aligns well with previous health care theoretical framework root cause analysis. The LSS, or Six Sigma, is a set of techniques to analyze and dissect multiple outcomes essential to the performance improvement process. The multi-process enhances the reliability of the change process and promotes an environment for continuous improvement and just-in-time intervention. Define, Measure, Analyze, Improve, and Control (DMAIC) is a systematic approach to problem-solving to identify and improve existing process inefficiencies with unknown causes. As one of the essential tools in any continuous improvement toolbox, this five-phase strategy is the foundation for any process improvement project (Honda et al., 2018).

Most often associated with Six Sigma or Lean methodologies, DMAIC is also used by those who do not subscribe to any methodology but rather share a common goal of improving operations and becoming more efficient. With proper implementation, the DMAIC process provides a practical problem-solving framework to standardize root cause thinking, reduce variability, and ensure world-class RCA results (Honda et al., 2018).

Work Process

The team members analyzed the themes obtained from program evaluations, preceptor evaluations, nurse manager program evaluations, and nurse trainee evaluations. The themes identified include didactic content, simulations, program duration, qualifications, program overview, faculty program role, and a plan to track program retention and recruitment rates in the first and third years of transition into the professional nurse role.

The systematic process of combination and revision is a modernization of the RCA process. The project provides an ongoing framework that resulted in the advanced practitioner trainee program aligning under nursing academia and provided a framework for program work plans, didactic, simulation, and a venue for ongoing collaboration. The programs collectively addressed the organizational goal to meet increasing attrition rates due to an aging population of nurses, recruitment dynamics, and retention anticipating the growing veteran population. The outcomes of this project demonstrated the use of the organization change process using LSS to revise program structure and maximize outcomes of two nurse trainee programs. This project's outcomes also aligned faculty resources to combine infrastructure, which meets changing program needs to expedite training rigor to maintain program requirements per the mandated policy directive and complexity of changing needs required for an integrative health care system. The revision of the program's infrastructure by outlining a plan that captures commonalities of both programs and restricting the programs under the umbrella of nursing academia combine the resources of both programs. The project work enhanced teamwork, developed program objectives, and ensured program effectiveness under one departmental infrastructure. The group feedback, along with a comprehensive review of the literature, resulted in the team recommendations that the revised program be structured as follows.

The theoretical model for instruction used the novice to expert theory by Benner as a clinical practice model. The quality improvement project allowed for combination of lesson plans and objectives. In addition to eliminating waste and rework through a reduction in the number of didactics offerings from 22 to 14, rework provided a standardized workplan to track a trend recruitment and retention using LSS. The new structure included the following key changes:

- Goals, activities, resources, and evaluation measures are to be aligned.
- Didactic content is to be provided in monthly didactic sessions, eliminating multiple didactic sessions. This allows for conservation of nurse education resources.
- Simulations are to be aligned with didactic information to reinforce the use of concepts into actual practice. Due to the continuing COVID-19 pandemic, the group was investigating alternatives to in-person simulation, including video simulation activities provided by many publishers.
- Additional content is to be added for dealing with potential patient violence, de-escalation techniques, and self-care activities.
- Program duration is sustained at 1 year, consistent with Benner's principles of novice to expert.
- Qualifications of staff meet the requirements of the academic partnership to ensure accreditation guidelines are met.
- Program instructional roles assignments align with specific areas of clinical expertise in addition to strengthening a mentoring partnership between the medical center and academic advisors.

Limitations

The project progression was limited by the facility and institution's IRB (see Appendix A) process and the continuation of the pandemic. This study was limited to one government facility in one state and subject to both CCNE accreditation standards and federal funding agency standards.

Interpretation and Inference of Findings

The federal organizational directive required an operational plan to minimize the gap between academia and nursing practice by implementing a nurse trainee program. The two programs competed for resources and operated under different sets of goals and activities. This workgroup allowed different stakeholders to engage in a collaborative effort to create one best practice residency program. Nurses must possess the knowledge, skills, and behaviors to provide quality veteran-centered care

Inferences of Findings

The veteran population is estimated to increase to over 8 million in the next 10 years, and the advancing average age of nurses in this integrative health care system requires a plan to meet the attrition rate (Nash et al., 2018). The two established nurse residency programs provided an excellent action plan to close the gap between academia and practice. Due to organizational disparities between the programs and the duplication of resources, leadership decided to form a collaborative effort to promote an interdisciplinary approach to learning using the themes identified in the study anticipating management of resources, funding, and all-inclusive infrastructure regardless of discipline. The project utilized the adult learning theory, interpersonal relationships, and a systematic change model framework in the DNP study. The importance of life experiences, maturing self-concept, and social roles are significant concepts of adult learning theory (Morris, 2018) empowering the nurse trainee individuals' motivation to learn. The project supports a psychologically safe environment for novice beginners and organizational stewardship.

Chapter Summary

This chapter discussed the process for combining two residency programs into a single program to optimize resources, using feedback from stakeholders, best practice literature, and adult learning theory. The COVID-19 pandemic shifted the focus from in-person training to a more virtual delivery of didactic and simulation examples and the use of videoconferencing for individual and group support.

Chapter 5: Discussion of Findings

The project goal was to optimize the new nurses' experience in the practice environment. Infrastructure and resource utilization directly impact an environment that positively enhances a new nurse's psychological development and directly impacts recruitment and retention environment. The revision of the nurse trainee programs allowed for an anticipatory approach delineating the program trajectory of each trainee program. This scholarly project was unique as it did not focus primarily on information the nurse trainee is taught but, instead, on how processes influence and impact the overall perception of the new nurses' knowledge in the selected area of work.

The revised program ensured that faculty and new nurses had a cohesive curriculum, simulation scenarios specific to the practice environment, and a framework for just-in-time quality monitoring and improvements of training programs. The revision specifies a process to enhance evidenced-based practice and continuity in trainee information. Ensuring that the residency program has a quality framework developed using best practices and standards established for didactic and simulation allows trainees to exit the program ready for practice with baseline knowledge and skills that ensure quality patient outcomes.

Implications for Leaders

Leaders have a financial duty to the organization and professional duty to ensure the best practice support for nurse residency and transition programs. The veteran population is estimated to increase to over 8 million, and the advancing average age of the nurse in the integrative health care system requires a plan to recruit and retain new nurses to meet the attrition rate. The combination of the two established nurse residency programs provided an excellent opportunity to close the gap between academia and practice. Combining the two programs allowed leadership

to revise the trainee program to maximize resources management and institute continuous improvement based on stakeholder feedback. The program supported the skills of a nurse trainee and provided a psychologically safe environment for novice beginners. The use of teams to lead the quality improvement effort empowered the nursing workforce to contribute to continuous improvement within the organization. The use of structured tools guided the process. Leaders should encourage informal leaders and management to come forward and lead these types of quality improvement efforts. Additional education on process improvement using LSS in the management of nurse transition programs would eliminate duplication of efforts and improve program operability.

EBP Findings and Relationship to DNP Essentials

The completion of this doctoral project demonstrates competence in the eight DNP essentials for advanced practice nursing. This section presents evidence of accomplishments to meet *The Essentials of Doctoral Education for Advanced Nursing Practice* (American Association of Colleges of Nursing, 2010) as follows:

Essential I: Scientific Underpinnings for Practice

The project provided a conceptual framework meeting the requirement for scientific underpinnings in nursing to examine the phenomenon in nursing to bridge the gap in academia to practice. The trainee program provides a psychologically safe environment to support the self-determination of a newly licensed nurse using concepts of Knowles's learning theory. Learning activities specific to the organization will ensure the development of the nurse to meet the complex health outcomes through didactic, simulation, and experiential activities.

Essential II: Organization and Systems Leadership for Quality Improvement and Systems Thinking

An analysis of the nurse trainee program for patients involved a group approach to obtain feedback from various stakeholders to identify process barriers that threaten sustainability to practical program goals and profitability related to program funding. The project demonstrated a systems approach and organizational leadership skills by implementing and completing this quality improvement project. I initiated a collaborative engagement to impact processes with key stakeholders across service lines with the support of nursing leaders to ensure that the problem of interest presented captured outcomes for the population served, met the organization's vision, and had relevance for the field of nursing using an evidence-based practice model. Organization and educational committee support led to the project's final approval.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

Evidence of knowledge gaps between academia and practice sustained the need for a nurse trainee program. The literature review demonstrated positive trends in recruitment, retention, and patient outcomes with the nurse trainee programs. The programs provided an opportunity to translate the information from the literature to positively impact the learning environment of the novice nurse to foster the nurse trainee's transition from academia to practice. This DNP project supported the evaluation of the impact of an evidence-based educational intervention designed to bridge the gap in knowledge for the nurse trainee. The effective use of research methodologies and information technology to collect and analyze the data from this project demonstrated clinical scholarship and competence to translate research into practice and evaluate nursing practice using evidence-based practice.

Essential IV: Information Systems/Technology and Patient Care Technology Improve and Transform Health Care

Virtual meetings aided in the development of this project and modernization in technology for group breakout rooms. The COVID-19 pandemic necessitated the evaluation of individual simulation exercises in lieu of group simulations. The team continued to explore technological options.

Essential V: Health Care Policy and Advocacy in Health Care

The development of this DNP project required aligning organizational policy to meet health care teaching strategies, anticipating meeting the changing health care complexity for the veteran population. This was in alignment with directives from the United States Under Secretary of Veterans Affairs to be implemented in the government's integrative health care system.

Recommendations for Future Research and Clinical Practice Outcome Evaluation Plan

Nurse recruitment and retention continue to challenge health care organizations, and staff disruption negatively impacts quality patient outcomes. The program's benefits provide the organization a staffed departmental approach to sustain equitable nurse trainee programs and support the ongoing clinical development of new nurses. The trainee program provides a pipeline for the future of the organization and proactive responsiveness to anticipate the changing complexities of the veteran population. The data allowed for ongoing program improvement and adjustment to the changing needs of the new nurse within an integrative health care system.

The ultimate purpose of this scholarly project was to determine if a standardized, combined traineeship program (residency) would enhance recruitment and retention of professional nurses within the VA within 3 years. The nursing shortage is a global concern, and

employers are losing professional nurses to international and contract opportunities that provide lucrative compensation because of the global pandemic. The quality improvement project revision of the nurse trainee programs was to improve recruitment and retention rates by aligning program resources that leverage evaluation plans with formative measures (intent to stay, self-efficacy, and efficiency) and longer-term outcome measures of retention at 1 and 3 years to further evaluate program effectiveness.

The established program collected cyclical data from valid and reliable tools to examine the confidence index during the interval phase of the program. According to Meyer and Shatto (2018), the Casey Fink model is an exemplar to examine nurse residents' intention to stay. The survey validates the program's effectiveness, ensures quality program outcomes, conserves valuable resources, and sustains identified operability of program infrastructure. A developed educational trainee plan would provide a standard operating procedure template and a systematic process for programs within the integrative system to maintain accreditation standards. The proposed plan for a contingency plan and emergency preparedness could easily translate to a virtual environment to ensure program funding is not threatened.

Recommendation 1: Choose a Valid and Reliable Tool or Adapt an Existing Tool (e.g., Casey–Fink Intention to Stay)

Adapt the tool to modify program workplans, crosswalks, and evaluations of program goals during each phase of the program through completion and 12 months later. The Casey–Fink graduate nurse survey is routinely administered in undergraduate programs and can be used to periodically measure the impact of the residency program.

Recommendation 2: Accredited Program Infrastructure: How Does Process Influence/Enhance Overall Readiness for Practice and Intention to Stay?

There is a lack of research regarding program outcomes related to program structure residency, and job embeddedness. There is a lack of empirical evidence of how professional nurses perceive job embeddedness in the United States, particularly within an integrative government health care facility.

Considerations for Further Study

1. Determine the relationship between job embeddedness of professional nurses and retention rates.
2. Develop a sustainable retention plan and benchmark that uses analytics to identify data themes, recruitment, and retention.

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Appendix A: Study Site Approval

**Nursing Service Research, EBP, or Quality Improvement
Determination Form**

Name of Person Submitting Project: Atalie Y. Henderson MSN, RN, RRT

Unit/Area of Work: Nursing Education
/Academia Role: VAHCS PBNR Coordinator

Name of School, if School project: Abilene Christian University

Title of Project: Impact of Standardization of VA Nurse Trainee Programs

**Name and Title of VA Mentor: XXXXXX XXXXXXXXXXXX, DNP, MSN,
MAOM, RN, NPD-BC, CNOR**

Submitted as (Check the box)

Research (will need IRB submission):	YES/NO	NO
Evidence Based Practice:	YES/NO	NO
Quality Improvement:	YES/NO	Yes

(see (https://vaww.va.gov/nursing/ebprc/docs/ebp_qi_rsrch.pdf) for determination criteria

Approved as (Completed by Chief Nurse Research and EBP): Quality Improvement Project

PROJECT INITIATION FORM

Title of Project: Effects of Standardization of VA Nurse Trainee Programs

Population for Project: *Definition of Key Terms*

- 1. Nurse trainees in Transition to Practice (TTP) and Post Baccalaureate Nurse Residency program (PBNR)**
2. Population focuses on the pipeline from academic affiliates who enter one of the two nurse trainee transition to practice programs.

**Proposed Start Date: 04/01/2021
Date: 08/2021**

Target Finish

Problem/Issue Statement:

PBNR program implemented following accreditation by CCNE, October 18, 2018, provides the rationale for putting TTP under accredited umbrella to standardize and create one education platform and plan that encompasses all transition to practice programs.

Background of the issue (*Local data brief*)

Current State:

PBNR CCNE Accredited Program in 2018, with both programs retention rates vary. TTP program brought under umbrella of accredited program in 2019 to affect standardization of academic transition programs of practice and process.

Newly standardized process aligns appropriate utilization of resources, streamlines throughput, eliminate waste and re-work by aligning with the expectations of high reliability organization with national accreditation.

Globally there is an increase in nurse turnover and new nurse recruitment and retention resulting in a staffing shortage

- Lack of training to support new nurses
- Lack of a standardized process for the training programs
- Per literature review (Meyer -Bratt, M. 2013& Eckerson, C. M. 2018).
 - 37% of new nurses leave the profession in the first year
 - 57% of new nurses leave the profession within the second year

Gap: Duplication of resources deviates focus within transition programs

Recommendation: align programs to eliminate silos that hinder growth or development of nurse trainee programs, while maintaining quality of service delivery and accreditation (local and national resource utilization).

Literature Support

Bratt, M., Baernholdt, M., & Pruszynski, J. (2012). Are rural and urban newly licensed nurses

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<https://doi.org/10.1080/0142159X.2017.1353071>

Clinical Question:

1. To what degree does the standardization process created when TTP was placed under PBNR umbrella, impact retention and recruitment in a large Federal healthcare facility since initiation on October 18, 2018.
2. Does a standardized nurse trainee transition to practice transition to practice program increase recruitment and retention at one and two years?

Goal/Proposed Results:

Goal: Develop an operational plan that meets the directive of high reliability organization.

- Improve new nurse recruitment to both Transition Programs
- Improve new nurse retention in the federal facility
- Improve patient outcomes through stabilized nurse staffing
- Improve efficiency within transition programs
- Eliminate duplication of resources
- Provide equitable training for safe patient outcomes

Design and Method: Effectiveness of programs, systems processes, staff retention

Study is a quality improvement project evaluating retrospective participant data to identify current cohort data and compare the standardized program to non-standardized program Last five cohort informed by standardized CCNE criteria. What was and what is compared to end of the year statistical data.

DMAIC PROCESS

The basic methodology consists of the following five steps:

Step 1. DEFINE process improvement goals that are consistent with customer demands and the organizational strategy.

Step 2. MEASURE key aspects of the current process and collect relevant data.

Step 3. ANALYZE the data to verify cause-and-effect relationships. Determine what the relationships are, and attempt to ensure that all factors have been considered.

Step 4. IMPROVE or optimize the process based upon data analysis.

Step 5. CONTROL to ensure that any deviations from target are corrected before they impact end results. *Pilot-test the new process.*

Proposed Benefit to VAHCS of the Project:

1. Elimination of rework, waste, and duplication of resources by streamlining the nurse trainee processes to combine financial resources and to develop a standardized nurse trainee transition to practice program.
2. This project will coordinate the work of an expert team to examine the structure, process, and the nurse trainee programs through ongoing data review and program revisions as recommended and approved by CCNE
3. The framework has created a collaborative to launch the groundwork of VAHCS Nurse Practitioner residency programs through deliverable items initiated with

September 2020 Cohort 1. This groundwork provided the framework of curriculum, flow, through-put and transition of experiential immersion of the program participants in an advanced practice residency.

4. APPROVALS

(please provide a signed letter for IRB Waiver to candidate for transmission to the academic institution)

Project Plan Approved for Implementation:

Dr. Ruth Robert *Ruth R Robert*
Chief Nurse Nursing Education

Project Plan Approved for Implementation:

Thomas, Maria Maria Digitally signed by Thomas,
Date: 2021.05.04 09:11:53 -05'00'

Maria Thomas, DNP, MSN, RN
Chief Nurse Research & Evidence-Based Practice

Project Plan Approved for Implementation:

XXXXXX XXXXXXXX 444960
Digitally signed by XXXXXXXX
444960 Date: 2021.05.10 10:59:53

XXXXXXXXXXXXXXXX, Ph.D.
Associate Chief of Staff for Research and Development