Clinical Ladder Mentoring:

The Impact on Nursing Professional Development

by

Kristin Merritt

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Abstract

Clinical ladder mentorship programs engage registered nurses in professional development, improve job satisfaction, and retention. The aim of this quality improvement project was to foster professional growth in early to mid-career nurses and increase clinical ladder participation rates by implementing a clinical ladder mentorship program using the *Plan, Do, Study, Act* cycle. Following mentorship training sessions for the Clinical Ladder Advisors, nurse mentees pursing clinical ladder advancement completed the Mentorship Effectiveness Scale survey, which evaluated the overall effectiveness of the Clinical Ladder Advisor and nurse mentee relationship and experience. One hundred percent (N=9) of the nurse mentees rated their Clinical Ladder Advisor mentors as effective and supportive while pursuing career advancement. However, clinical ladder participation rates remained flat at 2.2% compared to the previous fiscal year due to competing priorities within the organization. Future implications suggest expanding the clinical ladder mentorship program throughout the health system including the ambulatory setting, tracking and evaluating nursing turnover data system-wide, and transitioning to an electronic clinical ladder portfolio.

Keywords: Clinical ladder program; career advancement program; mentor; mentee; mentorship program

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Chapter One: Overview of the Problem of Interest

In 2013, the Bureau of Labor Statistics noted, the United States (U.S.) could face 1.2 million Registered Nurse (RN) vacancies by 2022. Due to the impending shortage, healthcare organizations must find ways to retain nurses to ensure the best patient outcomes. Front-line clinical nurses' make-up the most significant workforce within health systems (Drenkard & Swartwout, 2005). Clinical Ladder Programs (CLPs) are formal career development programs designed to facilitate career advancement, reward staff clinical competence, support retention, and recruitment, reduce nurse turnover rates, and improve quality patient and family care (Warman, Williams, Herrero, Fazeli, & White-Williams, 2016). However, many institutions struggle with low participation rates in CLPs. By understanding what factors influence clinical ladder participation can help develop effective services and appropriate resources to support experience bedside nurses working to complete programs (Zehler et al., 2015). Therefore, the purpose of this quality improvement project was to enhance professional development and increase clinical ladder participation rates in early to mid-career nurses by implementing a mentorship program (MP) for eligible nurses at the project site.

Background Information

In the early 1970's, CLPs were created as an effective strategy to attract and retain experienced nurses at the bedside (Pierson, Liggett, & Moore, 2010). The design of these programs aligns with an organization's mission, vision, core values, and strategic goals (Tomey, 2004). CLPs serve many beneficial functions for the experienced RN. One advantage of the career ladder is providing additional opportunities for experienced nurses to progress to higher levels of compensation, skill development, and accountability (Tomey, 2004). According to

Zehler et al. (2015), nurses who pursue the clinical ladder feel increased satisfaction and greater investment within an institution.

Another advantage of the clinical ladder is fostering professional development and serving as role models (Zehler et al., 2015). Individuals in CLPs are knowledgeable and skilled leaders within their departments. CLPs also assists the clinical nurse in transitioning and advancing in leadership, education, and clinical positions (Pierson et al., 2010). Staff retention is another benefit of a CLP. Studies have reported the cost to hire and orient a new nurse is estimated at $50,000 (Zehler et al., 2015).

Despite the benefits of the clinical ladder, many institutions struggle with the lack of RNs participating in the program for several reasons. Hospitals suffer from high RN turnover within the organization and lack of interest in advancing in their professional careers (Winslow et al., 2011). According to Zehler et al., (2015) increased RN turnover significantly impacts staff morale. Other factors affecting clinical ladder participation is lack of support and knowledge from nurse managers, requirements are unclear and confusing, time-consuming, and minimal pay increases for time spent pursuing the ladder (Zehler et al., 2015).

Significance of Clinical Problem

CLPs are effective in promoting and retaining experienced clinical nurses at the bedside; however, despite the positive outcomes of CLPs, RN turnover remains high and clinical ladder participation remains low (Pierson et al., 2010; Zehler et al., 2015). In 2015, the project site's Clinical Ladder Review Board (CLRB) redesigned the CLP to align with the five Magnet® model components.

The CLP consisted of three-levels with all new graduate nurses hired as a Clinical Nurse (CN) I. A CNI advances to a CNII after one-year of employment and must fully achieve or

exceed on their performance standards. CNs seeking clinical ladder advancement from a CNII to a CNIII or a CNIII to a CNIV status must complete and submit an application, as well as, a professional portfolio. The CNII can selectively apply for a CNIII after two years of clinical nursing practice by consistently achieving or exceeding performance standards, obtains a professional certification, functions in a leadership role in the department, member of a professional organization, and completes the required supplemental components of the clinical ladder. To advance to a CNIV, staff nurses must meet CNIII requirements, have four-years of clinical nursing practice, hold a Bachelor of Science in Nursing Degree (BSN), demonstrate leadership at the clinical service unit, hospital, or health system level, consistently achieves or exceeds performance standards and completes the required supplemental components of the clinical ladder.

In fiscal year (FY) 2016 to FY 2018, the project site experienced an average of 26% RN turnover, which exceeds the national average of 16.9% as seen in Figure 1 (NSI Nursing Solutions, 2018). The organization experienced an average of 38% RN turnover for employees with less than 90 days to three years of tenure in FY 2016 to FY 2018 as seen in Figure 2. According to Zehler et al., (2015) the cost to hire one RN is $50,000; therefore, the project site experienced a financial loss of 12.6 million dollars. In addition, 64% of the CNIIs at each hospital were eligible to pursue the clinical ladder as noted in Figure 3. This population of nurses are at a high-risk of leaving the organization.

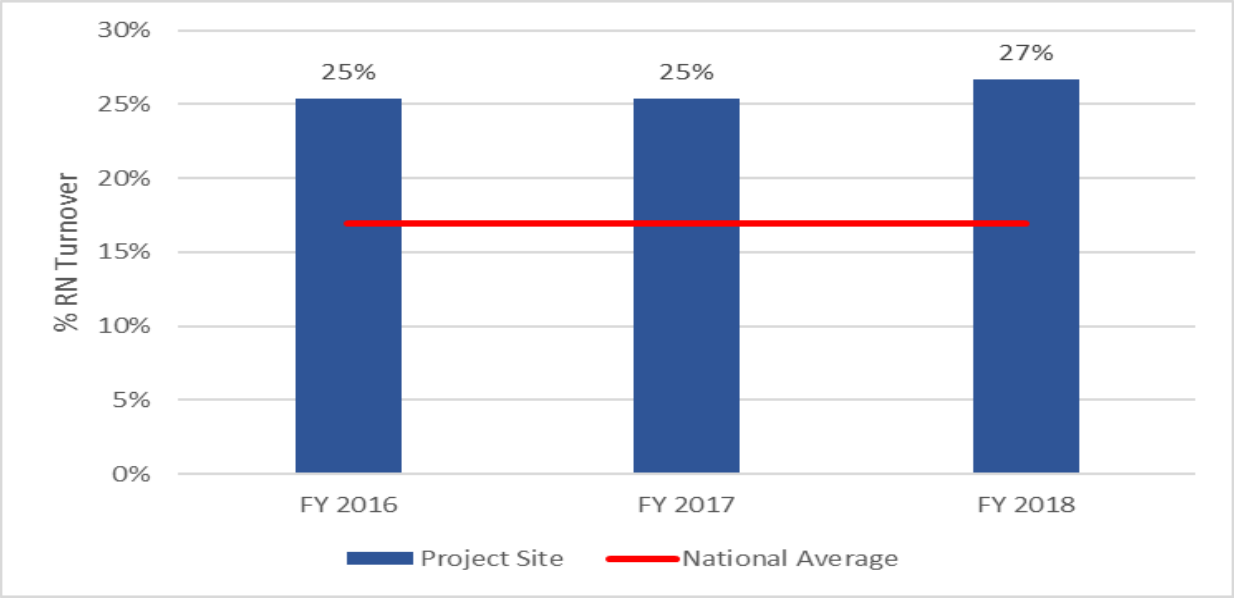

Figure 1. Percent Registered Nurses (RN) turnover by fiscal year (FY) compared to national average of 16.9%. From "2018 National Health Care Retention & RN Staffing Report," by NSI Nursing Solutions (2018).

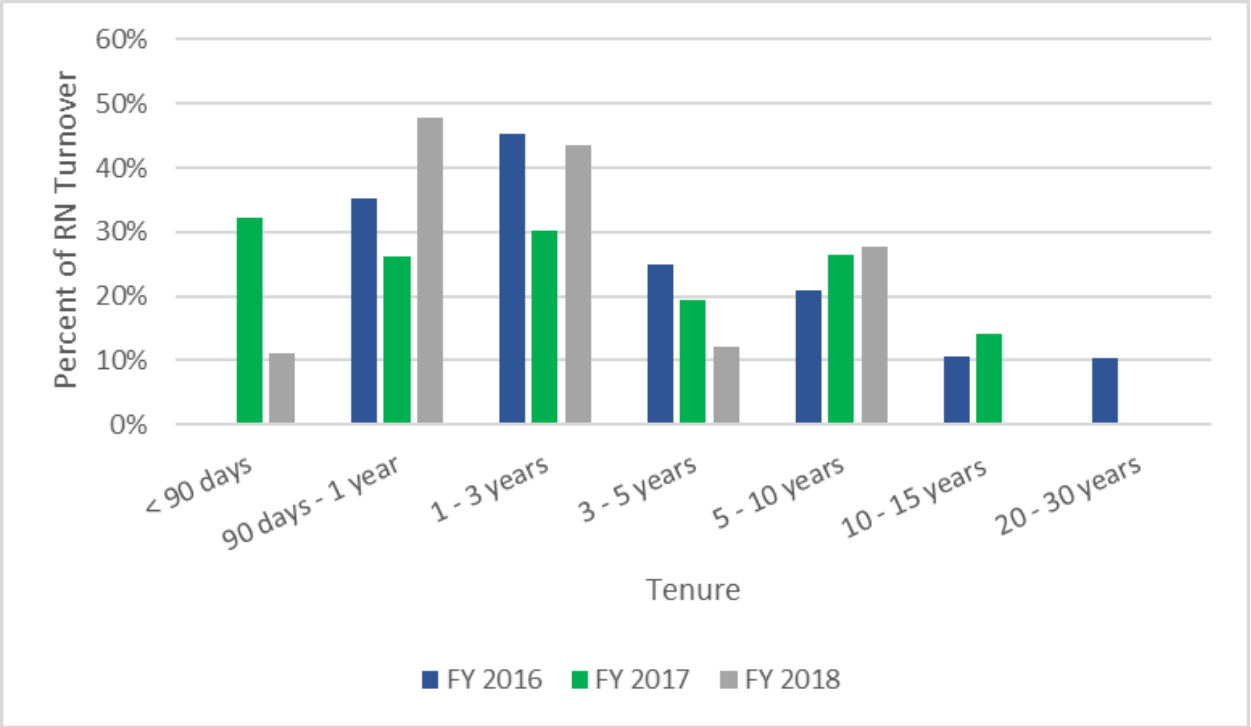

Figure 2. Percent Registered Nurses (RN) turnover based on tenure by fiscal year (FY).

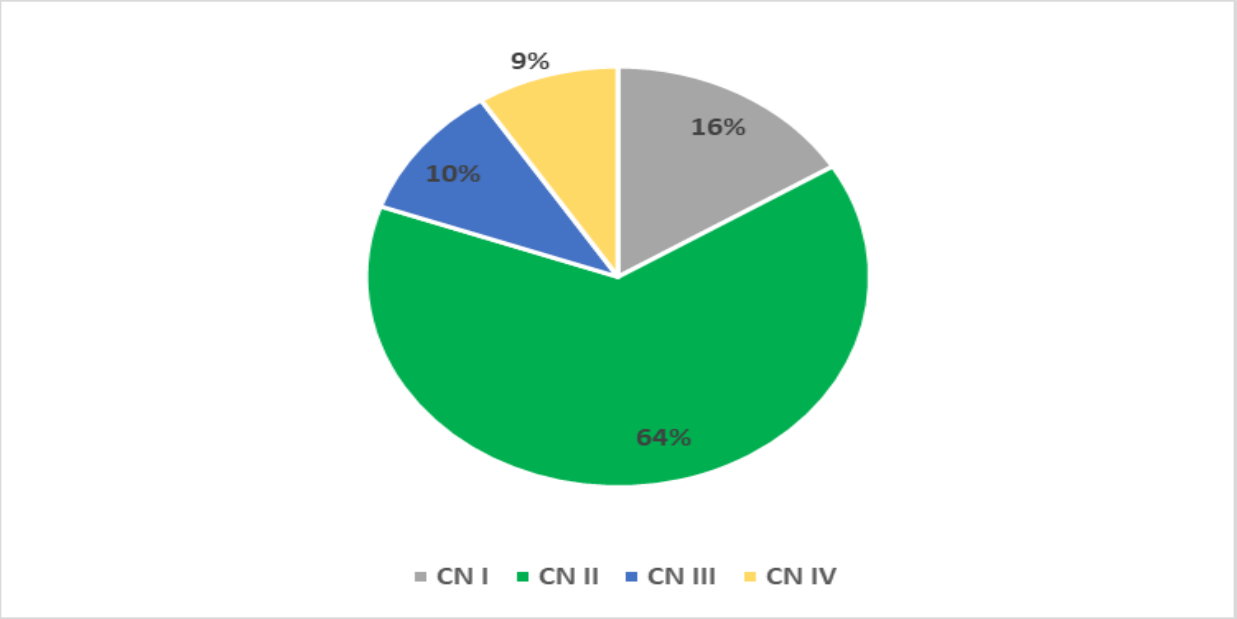

Figure 3. Percent of clinical nurse (CN) ladder level for fiscal year (FY) 2018.

The hospital employs 587 RNs and 401 of these CNIIs and CNIIIs are eligible to participate in the CLP. As noted in Figure 3, 64% of the CN IIs are eligible to advance to a CNIII status and 10% are eligible to advance to a CNIV status in the organization's CLP. However, only 2.8% (*n*=24) of the CNIIs submitted CN III portfolios and 1% (*n*=6) of the CNIIIs submitted CN IV portfolios to the CLRB from FY 2017 quarter (Q) four to FY 2018 Q four (see Figure 4). The data reflects there is a lack of interest in the CLP and an increase in RN turnover at the project site. Improving participation rates in the CLP can enhance professional development in nurses, retain experienced nurses at the bedside, increase patient outcomes, and result in significant cost savings to the health system (Drenkard & Swartwout, 2005; Tetuan, Browder, Ohm, & Mosier, 2013; Vaupel-Juart & Herron, 2014; Warman et al., 2016; Zehler et al., 2015).

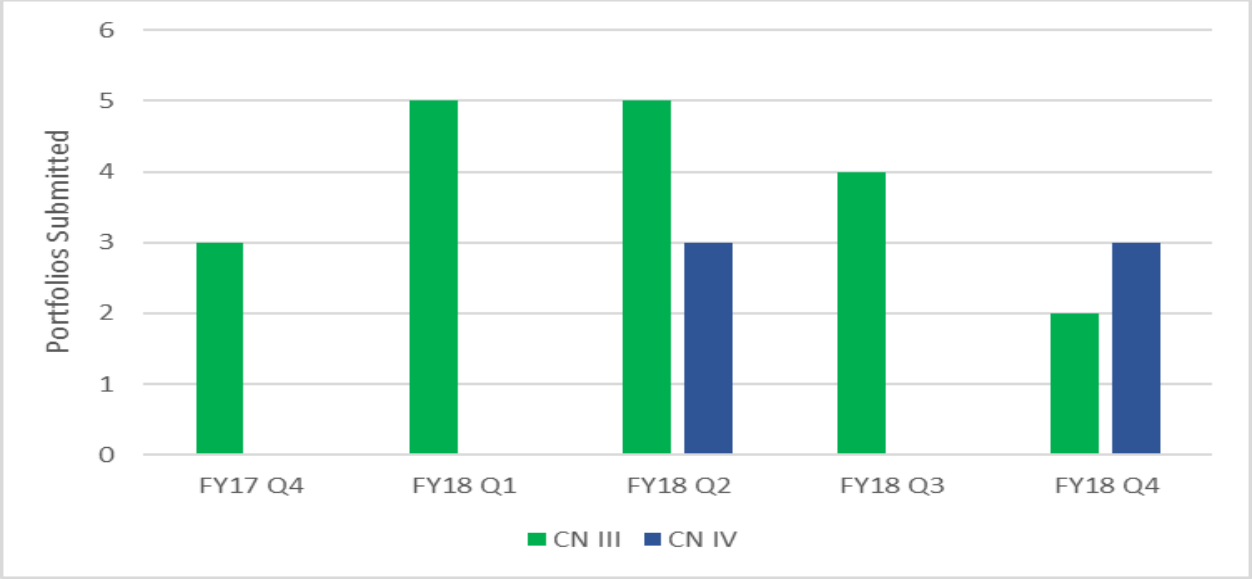

Figure 4. Number of clinical nurse (CN) ladder portfolios submitted to review board by fiscal year (FY) and quarter (Q).

Based on feedback from the CLRB, the CLA mentors lack role clarity and expectations and also receive multiple incomplete clinical ladder portfolios. Currently, CNIVs, Clinical Team Leads (CTLs), and Nurse Managers (NMs) email the clinical ladder chair requesting to be a CLA mentor. The CLP does not provide any training for the CLA Mentors. After agreeing to be a CLA mentor, the clinical ladder chair adds their name to the CLP intranet site. The nurse mentees select their CLA mentors from a list on the CLP website. Nurse mentee applicants commented CLA mentors either do not meet or minimally assist the applicant with guiding them through their portfolios due to the absence of structure around the role. As a result, each quarter the seven member CLRB spends 40 to 50 hours in a one-week timeframe correcting nurse mentee portfolios in order to advance them to the next clinical ladder tier. The average salary for the CLRB members is $30 per hour. Diverting the CLRB members away for 40 to 50 hours for one-week from performing their daily responsibilities to work with applicants on missing or incomplete clinical ladder application forms or redesigning clinical ladder project outcomes costs

the project site between $8,400 to 10,500. The lack of guidance from CLA mentors deters applicants from pursuing the clinical ladder.

Question Guiding Inquiry (PICO)

One evidence-based practice (EBP) approach used to develop a sound clinical question and to facilitate a literature search for a solution is the PICO (Moran, Burson, & Conrad, 2017). PICO is a mnemonic that stands for the patient, population, or problem, intervention, comparison, and outcome (Moran et al., 2017). Using this method helps summarize the clinical question. The clinical question for this EBP project asked: *"In early to mid-careerist nurses working in a community hospital, does a clinical ladder MP improve professional development and increase clinical ladder participation rates?"*

Population. The targeted population consisted of early to mid-career CNIIs and CNIIIs that work in a community hospital. Early-careerist are defined as recent graduates in their initial nursing positions (Friedman & Frogner, 2010). Mid-careerist are nurses in the middle of their career (Maddox-Daines, 2016). The project focused on the CNIIs and CNIIIs that were eligible to apply for the CLP. There were no exclusions based on age, gender, or ethnicities.

Intervention. The targeted intervention consisted of redesigning the clinical ladder policy by clearly defining the Clinical Ladder Advisor (CLA) criteria, responsibilities, and expectations for the role. The CLAs were educated about mentoring early to mid-career nurses by supporting and guiding them through the clinical ladder process from application to completion. The MP used a dyad mentorship model by pairing mentors and mentees from the similar service lines (Nowell, Norris, Mrklas, & White, 2017).

Mentorship training sessions were held to aid nurses pursuing clinical ladder advancement. Offering mentorship sessions that guide applicants through completing their

portfolios and review sessions before submission ensures successful completion of the CLP (Mijares, 2018; Vaupel-Juart & Herron, 2014; Warman et al., 2016). Improving the clinical ladder process can show an increase in participation of the program and aid nurses to grow professionally (Mijares, 2018; Vaupel-Juart & Herron, 2014; Warman et al., 2016).

Comparison. This project did not have a comparison group. The Mentorship Effectiveness Scale (MES; see Appendix A) was administered to nurse mentees that participated in the clinical ladder MP and evaluated the CLA mentoring characteristics permission was granted for tool use (see Appendix B). The MES survey was administered to nurse mentees after submitting the clinical ladder portfolio to the CLRB. Clinical ladder participation rates were also compared to pre and post implementation of the MP.

Outcomes. The first defined outcome was to enhance professional development. CLA mentors guided their mentees on completion of the portfolio, patient exemplar, and project. Post-implementation of the clinical ladder MP, CNII and CNIII nurse mentees completed the MES tool via Qualtrics. The second defined outcome was to increase clinical ladder participation rates. Hospitals with a defined MP within a CLP show increasing levels of nurse satisfaction, retention, and recognition (Fardellone & Click, 2013)

Summary

There are growing concerns in health care as baby boomers age into retirement. Many people fear as the nursing shortage worsens nurse retention, and patient outcomes will suffer (Drenkard & Swartwout, 2005). Hospitals with a CLP show increasing levels of retaining experienced nurses at the bedside by recognizing them for their advanced skill set, knowledge, and time within the clinical ladder significantly improves patient outcomes, staff morale, and nurse retention (Drenkard & Swartwout, 2005; Fardellone & Click, 2013; Vergara, 2017;

Warman et al., 2016). The evidence describes many motivators and barriers that impact clinical ladder participation. Revising the CLA position and providing one-to-one mentoring to RNs minimized barriers and assisted in retaining expert nurses at the bedside.

Chapter Two: Review of the Literature

Highly skilled nurses are needed to care for the aging population. As the nursing shortage continues, recruiting and retaining nurses has become an increasing challenge. Clinical Ladder Programs (CLPs) provide nurses with options to advance their clinical practice while remaining at the bedside. In fiscal year (FY) 2017, the project site experienced significant turnover in nursing and dismal clinical ladder participation. CLPs enhance professional growth, nurse retention, and increase staff satisfaction (Fardellone & Click, 2013; Zehler et al., 2015). A comprehensive literature review was performed to identify how a mentorship program (MP) positively impacts professional development and clinical ladder participation in the early to mid-career nurses. This chapter provides an in-depth analysis of the methodology, findings, and limitations of the literature review.

Methodology

Sampling strategies. A literature search was conducted through the East Carolina University Laupus Health Sciences Library and Duke University Library. The primary databases for this review included PubMed, ProQuest, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The following search terms were used: clinical ladder, MPs, clinical nurse, professional development, and mentor. The search term clinical ladder resulted in 115,278 articles, while MPs resulted in 237,238. When narrowing the search to contain clinical ladder and MPs, the article number decreased to 6,588. The search criteria included the date range from January 1990 to June 2018. Additional limits were applied to contain full text and peer-reviewed, related terms, English language in academic journals yielded 307 articles. By adding clinical nurse and professional development as additional search terms, the results decreased to 187 and 175 articles, respectively. Lastly, adding the word mentor yielded 35 articles. After 35 studies

were reviewed, 11 articles were used as evidence to address implementing an MP within the CLP.

Evaluation criteria. The literature selected for the evidence-based practice (EBP) change project identified evidence to support the clinical question and intervention of a MP within the CLP. The majority of the literature focused on MP studies used in various settings and three articles evaluated a clinical ladder MP were identified in the literature search. Initial evidence was chosen based on implementing CLPs and MPs. The remaining items supported best-practice approaches to mentor-mentee relationships to improve clinical ladder participation and professional development.

The studies chosen for inclusion were evaluated and assigned a level of evidence using the Hierarchy of Evidence as defined by Melnyk and Fineout-Overholt (2015). The hierarchy is categorized as evidence obtained from Level I: a systematic review of all relevant randomized controlled trials (RCTs), or evidenced-based clinical practice guidelines based on systematic reviews of RCTs, Level II: at least one RCT; Level III: controlled trials without randomization, quasi-experimental; Level IV: case-control and cohort studies; Level V: systematic reviews of descriptive and qualitative studies; Level VI: a single descriptive or qualitative study; Level VII: the opinion of authorities and/or reports of expert committees. The appraisal of studies chosen from inclusion for the literature analysis included all levels of evidence. A detailed review of the Evidence Matrix Tool can be found in Appendix C.

Literature Review Findings

Clinical ladder mentoring programs. In 2012, Warman, Williams, Herrero, Fazeli, and White-Williams, (2016) redesigned and implemented a CLP after staff participation decreased to align with the five Magnet® model components and included a point system. During the redesign

phase, the task force met for 14-months queried another hospital about CLPs, conducted a literature review, and solicited staff feedback through surveys and focus groups. The committee implemented ongoing educational sessions during various shifts and days of the week to mentor applicants through the clinical ladder process. For one year, the number of staff in the redesigned clinical ladder increased by 23% then decreased by 13% to 23% from 2013 to 2015 respectively (Warman et al., 2016). After revising the clinical nurse (CN) II and CNIII, several nurse leaders were no longer eligible for career advancement; therefore, noting a reduction in participation from 2013 to 2015. However, the staff feedback through an online survey indicated, staff strongly agreed (n = 162) the revised CLP provided professional growth (56.17%), positively impacted staff satisfaction (37.65%), retention (34.57%), and overall were satisfied (38.25%) with the changes.

Vaupel-Juart and Herron (2014) measured the effects a clinical ladder MP had on nurses in a surgical intensive care unit from 2012 to 2013. A committee was formed to address participation in the CLP, RN to Bachelor of Science in Nursing (BSN) program, and certifications. The department's goals were to increase clinical ladder advancement and certification by 5% and RN to BSN enrollment by 2% each year. Through a MP, the committee mentored the nurses from the start of the application to completion. The results showed a 16.5% increase in clinical ladder participation, an 8.26% rise in certifications, and a 4.96% uptick in RN to BSN program enrollment. The program evaluation feedback noted the clinical ladder mentoring improved participation and engagement.

General mentorship programs. Mentoring is an intervention to engage nurses in professional development, improve job satisfaction, and retain nurses (Vergara, 2017). Experienced RNs serving in mentorship roles have shown to positively impact their well-being,

the mentees', and the organization (Goodyear & Goodyear, 2018; Latham, Hogan, & Ringl, 2008). In a systematic review, Chen and Lou (2013) reviewed the effects MPs had on staff retention, professional development, nurse competency, and job satisfaction using a quasi-experimental study design. The study examined MPs from 2001 to 2010. Of the five articles included in the study, two reduced nurse turnover while one study noted decreased medical negligence (Chen & Lou, 2013). Lastly, four of the studies noted MPs improve nurse competencies, job satisfaction, and communication skills.

Adeniran, Smith-Glasgow, and Bhattacharya (2013) used a cross-sectional design to determine levels of participation in mentoring, self-efficacy, professional development, and career advancement, in nurses educated in the U. S. (UENs) compared to nurses trained internationally (IENs). The goal was to achieve a medium effect (= 0.50) between the UENs and IENs, α of ≤ 0.05 and power of 0.80. A power analysis was done to determine the appropriate sample size. To ensure adequate sample size, a minimum of 110 nurses needed to complete the survey and 55 respondents in each group. To participate in the study, nurses must have three-years' experience, actively working in Philadelphia County, proficient in English, be between ages 22 to 65 years old, and able to navigate computers. Due to the inclusion criteria, 500 surveys were emailed to UENs and IENs. Survey instruments used to measure mentoring and self-efficacy were Mentorship Measure and New General Self-Efficacy Scale.

Adeniran et al. (2013) had 200 respondents complete the survey which equated to 145 UENs and 55 IENs. The initial results showed UENs and IENs identified mentors during their career which relates to growth levels of self-efficacy. UENs were promoted 97% at least once within a five-year period compared to 29% of the IENs. The exception was role model component of mentoring and participation in professional development and career advancement

between UENs and IENs. The researchers posit structuring career advancement programs with mentoring is critically essential in professional growth.

Jakubik, Eliades, Gavriloff, and Weese, (2011) conducted a descriptive, cross-sectional study that looked at mentoring benefits for pediatric nurses in a Midwestern children's hospital. Cohen's power analysis table determined the minimum sample size of 100 respondents and identified *p*-value of 0.05 or less, a moderate effect size of 0.50 and power of 0.80. The inclusion criteria for the study was one-year of nursing experience and participated in a mentor relationship within the hospital. Those nurses excluded were individuals mentored outside of the organization. An online demographic survey, the Caine Quality of Mentoring (CQM) Tool and the Jakubik Mentoring Benefits Questionnaire (Jakubik MBQ) were administered to 967 nurses with 462 responses. Of the 462 nurses, 138 subjects met the sample size. The instruments had internal consistency with Cronbach alpha of 0.97 and 0.98 respectively. The results showed overall most of the nurses intended on staying in the organization (58%) and have been mentored during their tenure (51%). The hypothesis to determine if quantity, quality, length of employment predicts mentor benefits versus only one variable was accepted validating that structured and quality mentoring results in retaining staff.

Cottingham, DiBartolo, and Battistoni (2011), implemented a community-based nurse MP to increase retention rates in a rural area. This grant initiative was supported by the Robert Wood Johnson and the Northwest Health Foundations. The program matched an experienced nurse to a new graduate nurse to provide mentoring and professional development guidance for the first year. After 12-months, the mentor and mentee participated in professional development seminars along with a local nursing college. These individuals also collaborated with local youth clubs to educate others about nursing and to participate in health fairs. As a result of the

mentoring initiative, 100% of the mentees were satisfied with the program, intended to stay with the organization and the profession. From an economic perspective, the hospital saved $328,800 in turnover costs by implementing the MP.

Mills and Mullins (2008) implemented a formal nurse MP over a three-year period to improve nurse retention, turnover, and professional development. In the MP, new RNs were paired with mentors throughout a four-hospital system. The program structure included mentor training and matching the mentor and mentee. The evaluation of the project included the mentorship experience in job satisfaction and professional confidence through surveys and focus groups. RN attrition rates and program cost-effectiveness was also tracked. Mills and Mullins noted RNs participating in the program had lower turnover rates than those nurses that did not attend. The average turnover rate for the four-hospitals was 8% (n=450). After program costs were deducted, the average cost savings over a 3-year period was $1.4 to $5.8 million. As a result of the program, mentors and mentees reported an increase in job satisfaction and professional confidence.

Fleming (2017) explored how a peer mentor program lead by expert clinical ladder nurses, also known as specialty scholar peers, guided bedside nurses in conducting quality improvement projects using the Plan, Do, Check, Act (PDCA) model. Executive leaders selected expert staff nurses to participate in the peer mentor program. After being elected, the specialty scholars took part in formal training that included relationship building and project management. The project measured peer mentor engagement, program growth, and collaboration (Fleming, 2017). One-year post-implementation, the peer mentor program experienced a 66% increase in engagement and 125% in program growth.

Mentorship effectiveness scale. The effectiveness of the mentorship relationship between the mentor and mentee play a significant role in the outcome of a program. In 2005, Berk, Berg, Mortimer, Walton-Moss, and Yeo, created a comprehensive and standardized tool called the Mentorship Effectiveness Survey (MES; see Appendix A) to evaluate 12 behavioral characteristics of mentors. The 12-item MES uses a six-point Likert-type scale (0 = strongly disagree to 5 = strongly agree) or not applicable if the question does not apply to the mentor-mentee relationship. Mentees rate mentors based on the 12 characteristics. The ratings can be scored by each statement or a sum total for all 12-items ranging from a score of zero to 60. Each mentor and mentee relationships are different; therefore, psychometric issues including content-related validity and response bias is possible (Berk et al., 2005).

McBride, Campbell, Woods, and Manson (2017) developed a mentoring network consisting of three mentors, a primary, research, and national mentor, and one mentee in a nurse faculty scholars program. The MES scale was distributed to the mentor to evaluate the effectiveness of the three mentors. This study utilized the total score of the MES tool. From 2008 to 2012, the average assessment of primary mentors was 56 on a scale of zero to 60. National mentors averaged a rating of 55 and research mentors averaged 54. Overall the ratings were favorable for each type of mentor. During the five years, the average decreased once for national mentors indicating problems with matching mentors to mentees and lack of guidance. The biggest weakness noted in the results was lack of accessibility because of limited time to meet.

Dehon, Cruse, Dawson, and Jackson-Williams (2015) conducted a study evaluating using the MES to determine if having a mentor in medical school improved the chances of the student being matched to their first choice for Emergency Medicine (EM) residency programs. The researchers used a convenience sample of 297 EM students. In this group, 199 participants

reported having a mentor. The MES tool was administered to the students to evaluate the mentor's effectiveness and used a total score on the zero to 60 rating scale. Pearson's correlations were used to examine the relationship between having a mentor and matching to the EM residency program of choice. An independent t-test was used to compare differences in MES total score to those residents that matched with their first, second, or third choice. Dehon et al., found there was no significant correlation between having a mentor and match outcome. However, when the researchers reviewed MES total scores and if the participants matched with their top two choices, Dehon et al. found the MES score was significantly higher. The students that matched with their first or second choice had an average MES mean of 51.13 compared to a mean of 43.59 for those students who matched with their third choice or higher. Therefore, Dehon et al. concluded students with an effective mentor are more likely to match with their top choice in programs.

Limitations of Literature Review Process

There is a significant amount of research about CLPs and MPs in the nursing literature. Nursing CLPs began in the early 1970's while nurse MPs started in the early 1980's (Ali & Panther, 2008; LaFleur & White, 2010; Nelson & Cook, 2008; Pierson, Liggett, & Moore, 2010). However, the most significant limitation of the literature appraisal was the lack of articles integrating mentoring within the CLPs. The MP and CLP literature review noted these programs individually resulted in the same outcomes such as professional growth and development, nurse retention, job satisfaction, and improved patient outcomes. Another limitation in the research was the majority of the EBP studies were Level VI and Level VII evidence. Therefore, to implement a clinical ladder MP, it was necessary to develop a program based on theoretical concepts of mentorship and tailored to the experienced clinical nurse pursuing the clinical ladder.

Discussion

Conclusion of findings. A MP is an appropriate intervention for fostering professional development and participation within a CLP. The evidence revealed MPs and CLPs positively impact and benefit nurses and the organization. Several studies noted in a structured mentor relationship, nurses improved their overall confidence, grew professionally, and stayed longer within the organization (Adeniran et al., 2013; Chen & Lou, 2013; Jakubik et al., 2011; Mijares, 2018; Mills & Mullins, 2008). Another study noted a decrease in medical negligence through a mentoring program (Chen & Lou, 2013). Several CLPs used mentors to support clinical nurses and resulted in a rise in participation, engagement, and growth (Mijares, 2018; Vaupel-Juart & Herron, 2014; Warman et al., 2016). Based on the literature findings, the intervention for the project supported implementing a clinical ladder MP to foster professional development and increase participation rates for early to mid-career nurses.

Advantages and disadvantages of findings. The literature review advantages strongly supported the value of CLPs and MPs. Both programs improved staff satisfaction, professional development, retention, and patient outcomes (Adeniran et al., 2013; Chen & Lou, 2013; Jakubik et al., 2011; Mills & Mullins, 2008). The findings also noted these programs positively impact the financial costs to organizations by decreased patient costs, turnover, and reduced negligence (Chen & Lou, 2013). By implementing mentors within the CLP to assist nurses interested in advancing their profession had a significant impact on patients, nurses, and the overall institution.

The disadvantages of the evidence were the limited studies on operationalizing a MP within a CLP. Several studies implemented mentors within their CLPs successfully. However, some of the literature findings were restricted in demographic data and survey tools.

Utilization of findings in practice. Implementing a MP within the CLP can provide expert guidance to the early to mid-careerist nurse to foster professional development in their training and increase clinical ladder participation. By revising the CLA position, revising the CLP policy, these nurse experts served as mentors to bedside nurses with the desire to climb the clinical ladder. As a result, bedside nurses professional development and participation increased. By merging a MP within the CLP results in similar beneficial outcomes for nurses, patients, and the institution (Chen & Lou, 2013; Goodyear & Goodyear, 2018; Jakubik et al., 2011; Mills & Mullins, 2008; Scurria, 2018).

Summary

In summary, the state of healthcare is continually changing. Organizations must find creative ways to recruit, retain, and grow nursing staff. The evidence supports implementing a clinical ladder MP that reinforces clinical nursing practice, recognizes clinical expertise, enhances professional development, and increases nurse satisfaction and retention. In addition, developing and retaining clinical expert nurses at the bedside is essential for the quality patient care and safe patient outcomes.

Chapter Three: Theory and Concept Model for Evidence-based Practice

The theoretical foundation and concept model for evidence-based practice (EBP) is vital to the planning process as the project manager (PM) attempts to explain and change nursing practice. A desire to solve a problem drives the PM to explore theories and current EBP research to inform and guide the project. Nurses use theories and concept models to structure their practice and improve quality of care (Moran, Burson, & Conrad, 2017). Nurses must understand theories and nursing concepts used in practice to comprehend why and how projects succeed or fail.

A conceptual model for EBP guides research and practice. The quality improvement project established a mentorship program (MP) within the Clinical Ladder Program (CLP) to foster professional development in early to mid-career nurses. Kanter's Structural Theory of Organizational Behavior was used as the framework for this project. Kanter's theory consists of six conditions, the opportunity for advancement, access to information, support, resources, formal power, and informal power that proved valid in empowering staff nurses and overall organizational efficiency. Deming's Plan, Do, Study, Act (PDSA) was the EBP improvement model that guided the project. The purpose of this chapter is to link Kanter's theory with the clinical ladder MP to enhance professional development and the EBP model used to create a structured MP for the Clinical Ladder Advisors (CLAs).

Concept Analysis

Mentor. Despite the significant amount of research in the literature, the term mentor has taken on numerous meanings since the term was coined 2,600 years ago (Berk, Berg, Mortimer, Walton-Moss, & Yeo, 2005). Other words used in the literature are mentoring, adviser, guide, confidant, coach, and counselor. There has been a paradigm shift in mentors since the 20th

century. Previously mentors were a one-to-one relationship prompted by the mentor, one skill set, and often occurred early in a person's career (McBride, Campbell, Woods, & Manson, 2017). In the 21st century, mentors have evolved into someone having multiple skills, guiding and supporting more than one person throughout a career (McBride et al., 2017). For this project, the mentor was defined as an experienced nurse leader serving in the role as a CLA who functions as a motivator, educator, nurturer, and guide to an early to mid-career nurse interested in advancing on the clinical ladder.

Mentee. A mentee is an individual with an aspiration to learn, able to receive constructive criticism and guidance, possess career aspirations, and motivation (Perry & Parikh, 2018). Other terms used in the nursing literature is protégé, newly hired nurse, and nurse graduate. For this project, the term nurse mentee was defined as an early to mid-career Clinical Nurse (CN) II or CNIII with a desire to advance on the clinical ladder with guidance, support, and assistance from a CLA mentor.

Theoretical Framework

Rosabeth Moss Kanter's Structural Theory of Organizational Behavior was found to be used as a theoretical framework in multiple nursing studies. As healthcare continues to evolve and face new challenges, nursing leaders must reevaluate strategies for operations and structure. Kanter's theory has proven to positively impact employee empowerment, job satisfaction, trust, and organizational commitment (Laschinger, Finegan, & Shamian, 2001).

Kanter's theory is the theoretical framework that guided this project. This theory focused on the structures within the organization as opposed to the individual. Kanter's theory noted that employees who feel supported and empowered by their organization continue to grow, learn, and develop a stronger relationship with their employer (Kanter, 1993). According to Day,

Minichiello, and Madison (2006) research shows that nurses who feel supported by their organization intend to stay in their current positions. Retaining nurses translate to decrease turnover, improved quality and safe patient care, and overall organizational performance (Day et al., 2006).

Opportunity for advancement, access to information, support, and resources, formal power, and informal power make up the six conditions of this theory (Ledwell, Andrusyszyn, & Iwasiw, 2006). Opportunity is defined as a chance to advance in the institution or participate in change (Ledwell et al., 2006). Knowledge needed to perform the job is considered access to information (Ledwell et al., 2006). Support and access to resources occur when individuals receive positive feedback, able to make independent decisions, and receive materials, money or recognition. According to Kanter (1993), power was defined as the ability to get things done to mobilize resources and accomplish organizational goals. Lastly, informal power comes from building relationships with others (Upenieks, 2002). The critical point of Kanter's theory is that employees display various behaviors based on the organization's structures in place.

Application to practice change. Mentorship programs are designed to guide a mutual relationship between experienced nurses and less experienced nurses through professional growth. As the largest profession in the country, mentoring develops nurses into leaders and allows them to play a vital role in health care (Institute of Medicine [IOM], 2010). Mentoring also strengthens the nursing profession and as a result, improves the quality of patient care, safety, and outcomes (IOM, 2010). Kanter's Structural Theory of Organizational Behavior provided the foundation for the clinical ladder MP.

The project site's CLP offers early to mid-careerist the opportunity to promote excellence in their practice, participate in change and innovation and advance within the organization.

Nurses pursuing the clinical ladder seek personal and professional growth, recognition for their accomplishments, and learning opportunities. Although the CNIIs and CNIIIs are aware the CLP exists, many do not have the knowledge, resources, and information necessary to complete the lengthy process.

Clinical Nurse IVs, Clinical Team Leads, and Nurse Managers serve as CLA mentors within the hospital. CLA mentors maintain formal and informal power within the organization. The CLAs connections within the project site enabled them to form alliances with various groups, mobilize resources, and be useful in their role. The advisor's power also influences access to opportunities, resources, information, and support for the nurse mentee.

The CLA mentor is an invaluable support system that provides formal leadership, information regarding progress, and feedback to the nurse mentee. These mentors were established to provide support and knowledge to guide the nurse mentees through the clinical ladder progression. Kanter (1993) noted employees need resources and training to achieve their goals. Kanter believes that leaders sharing their power by empowering other individuals results in increased organizational performance (Davies, Laschinger, & Andrusyszyn, 2006). Also, Kanter theorizes with the appropriate resources, support, and information, employees' will improve skills, professional growth, and make informed decisions; therefore, benefiting the institution (Davies et al., 2006; Upenieks, 2002).

EBP Change Theory

Numerous models guide nurses and other healthcare providers through systematic processes for change to EBP. In 1993, Dr. W. Edwards Deming modified the Shewhart cycle and called it the Plan-Do-Study-Act (PDSA; Moen, 2009). The cycle provides a consistent and repeated improvement of processes, products, or services in healthcare (Moen, 2009). In

addition, the PDSA model emphasizes understanding the process and learning from each step of the plan. This model was applied to the implementation of a MP within the project site's CLP.

The PDSA is a four-step cycle that allows teams to implement change, solve issues, and continuously improve processes. The *Plan* is the first step that identifies the opportunity for improvement and analyzes the problem. There are several methods to determine issues such as flowcharts, cause and effect diagrams, data collection, and brainstorming to name a few. *Do*, is the second step in the cycle that enables the team to develop and implement a solution. During this phase communication to those individuals affected by the change is crucial to the project's success. Evaluating the results and comparing them to the predictions is the third phase called *Study*. This phase is a vital step in the cycle because it illuminates what was learned, what went wrong and did the improvement work. The last stage of the PDCA cycle is *Act*. Based on what the team learns from the small pilot test, this step determines whether the improvement will be adopted, updated, abandoned, or necessary to run through the cycle again. (Spath & Kelly, 2017).

Application to practice change. Using the Deming PDSA cycle, the PM was able to follow the steps to complete an EBP change. The detailed process using the PDSA for the clinical ladder MP was:

***Plan*.** The PM met with members of the Clinical Ladder Review Board (CLRB) committee to discuss areas of opportunity for improvement. The group noted the CLA role and expectations were not clearly defined and numerous hours spent reviewing and identifying missing information in the submitted applicants' portfolios. As a result of the missing information, the CN was not promoted to the next level. The group also noted a decrease in clinical ladder participation since the revision of the CLP in July 2015. Many eligible nurses

cited time, money, challenging new requirements, and lack of support and guidance as reasons they did not apply. Also, a significant portion of the early to mid-career nurses that were eligible to apply did not pursue the clinical ladder. The PM and CLRB committee members reviewed the previous fiscal year's clinical ladder participation rates. Based on the feedback, the PM and team decided to redefine the CLA role and expectations and re-educate the CLA to serve as mentors to applicants pursuing the clinical ladder.

Do. The PM met with key members of the CLRB committee regarding the clinical ladder MP. The group revised the CLA role and clinical ladder policy. The PM developed and held mentorship training sessions for the CLAs after communicating to the CLRB, CLAs, and CNs interested in pursuing the clinical ladder about the project and receiving Institutional Review Board (IRB) approval. The Mentorship Effectiveness Scale (MES; see Appendix A), evaluated the effectiveness of the mentorship experience from the nurse mentees' perspective. Permission was received to use the MES (see Appendix B). The clinical ladder participation rates for February and May 2019 were documented and compared to previous years.

Study. The CLRB committee members and PM met to evaluate the MES and participation rate results in February 2019. The team analyzed the data to determine if it supported the improvements to the CLP. Also, the team reviewed feedback from the CLA and nurse mentee training sessions to decide what they learned and any areas to improve the project. The PM made the necessary program modifications before nurse mentees submitted portfolios to the May 2019 CLRB.

Act. Following the completion of the quality improvement project, the PM made plans to continue the clinical ladder MP. The PM discussed and encouraged the CLRB to continue training newly recruited CLAs to serve as mentors to nurses seeking clinical advancement.

Furthermore, the CLRB continued the review sessions for nurse mentees interested in the clinical ladder progression. The PM continued to assist training CLA to be mentors and serves on the CLRB.

Summary

Hospitals are strategizing ways to retain experienced nursing staff. CLPs and MPs have proven to retain and recognize nurses for their clinical competence, foster professional development, and improve patient outcomes. However, many organizations suffer from little interest and low participation rates. By supporting and guiding nurses through the clinical ladder process using CLA, mentors revealed an increase in participation rates. Kanter's Structural Theory of Organizational Behavior offered the CLA mentors' direction by enhancing resources, support, opportunity, and information, nurses seeking clinical ladder advancement to feel empowered and engaged in their work. The PDSA cycle guided the PM using a structured approach to improve the CLA role and implementation of an MP for the CLP.

Chapter Four: Pre-implementation Planning

Clinical Ladder Programs (CLPs) are designed to develop nurse leaders through professional growth opportunities. The Project Manager (PM) worked with the Clinical Ladder Review Board (CLRB) at the project site to establish clear expectations for the Clinical Ladder Advisors (CLAs). The concerns noted in the CLA role were lack of support and guidance for the nurse mentee during the clinical ladder portfolio development process, minimal communication between the CLA and nurse mentee, no CLA accountability to ensure the portfolio were accurate before submission, and dismal CLA attendance at quarterly CLRB sessions. The PM utilized Deming's modified Shewhart cycle called the Plan, Do, Study, Act (PDSA) to guide the quality improvement project. This chapter outlines an evidence-based practice (EBP) project to address professional development and clinical ladder participation using a structured mentorship program (MP).

Project Purpose

The purpose of this quality improvement (QI) project was to standardize the CLA role and expectations; while implementing a clinical ladder MP at the project site for Clinical Nurse (CN) IIs achieving a CNIII status and CNIIIs pursing a CNIV status. The standardization of the project included tools to evaluate the CLA mentors that nurse mentees completed after submitting their portfolio. Mentoring has shown to increase employee satisfaction, retain clinical nurses, and promote a healthy work environment (Mijares, 2018; Vaupel-Juart & Herron, 2014; Warman, Williams, Herrero, Fazeli, & White-Williams, 2016). The Mentorship Effectiveness Scale (MES; see Appendix A) evaluated the CLA mentoring characteristics and was administered to nurse mentees after submitting their portfolio to the CLRB. Also, the PM compared clinical ladder participation rates pre and post implementation of the structured MP.

Project Management

Organizational readiness for change. The project site's CLP was implemented in January 1995. The latest policy and application revision occurred in July 2015. During the last policy and application change, no expectations, criteria, or role clarity for the CLA was established. In addition, participation rates decreased. The CLRB agreed the CLP needed a structured MP led by the CLAs to help professionally grow early to mid-career nurses and increase participation rates at the project site. The literature also supports a structured MP in the clinical ladder. Structured MP improves overall professional growth, nurse retention, and the work environment (Adeniran, Smith-Glasgow, Bhattacharya, & Xu, 2013; Chen & Lou, 2013; Jakubik, Eliades, Gavriloff, & Weese, 2011; Mijares, 2018; Mills & Mullins, 2008). The project site had an established CLRB and designated CLAs to assist with mentoring nurse mentees through the application process to submission.

Interprofessional collaboration. Several organizational nurse leaders served on the project team. The community lead functions as the Administrative Director for Clinical Education and Professional Development (CEPD). This individual served as the primary contact and mentor for the PM offering advice, guidance, and expertise about the CLP. The Associate Chief Nursing Officer (ACNO) for Education and Clinical Nurse Educator for CEPD and Chair of the CLRB served as the CLP content experts. These individuals guided the content of the Clinical Ladder MP educational sessions, sample CN III, and CNIV portfolio, and CLA role and responsibilities. The project site's ACNO functioned as the site champion offering insight to the CLAs at the project site and advised what content was needed for the Clinical Ladder MP educational sessions. The Research Nurse Scientist served as the Institutional Review Board (IRB) consultant and was the person who advised the PM regarding the health system's IRB

application process for approval. This pivotal group collaborated with the PM throughout the planning stages of the project.

Risk management assessment. Conducting a thorough risk management assessment includes identifying the risks, evaluating the impact, and creating a plan to minimize adverse effects (Gray & Larson, 2006). The PM used the Strength, Weakness, Opportunities, and Threats (SWOT) analysis to assess and identify the project's risks (see Appendix D). The Clinical Ladder MP project was implemented in a 15-week timeframe; therefore, identifying any conditions that lead to risks and determining specific risks associated with the MP is crucial to the success of the project.

Strengths. There were several strengths for this project. The support and guidance from the project team to implement a structured MP for the CLP to assist in retaining expert clinical staff at the bedside was one key strength. Another strength was the highly qualified members of the CLRB comprised of CNs, Nurse Managers, CEPD Nurse Educators, Clinical Operations Directors, the Chair of the CLRB, and Nurse Residency Coordinator who brought their expertise and knowledge to the project. Also, the current clinical ladder policy, application, and portfolio aligns with the American Nurses Credentialing Center (ANCC) Magnet Recognition Program®. Another important strength is the CLRB meets and evaluates clinical ladder portfolios four times per year. This provides clinical nurses more opportunities to seek career advancement. Lastly, the PM did not request additional financial support for this QI project.

Weaknesses. The project site was experiencing turnover in nurses with one to three years of experience. These nurses are eligible to apply for the clinical ladder, but lack mentorship, support, and guidance to apply for the career advancement. The organization is recruiting new graduate nurses to replace the early to mid-career nurses, which results in a two-year delay

before these individuals can apply for the clinical ladder. Another weakness noted at the project site was the small number of CLAs causing additional CLAs to be recruited for the QI project. Lastly, the length of time to complete the clinical ladder portfolio was another weakness. As stated in the literature review, the amount of time to complete a portfolio is a deterrent for nurses to apply to the CLP (Zehler et al., 2015).

Opportunities. The ability to promote professional development in early to mid-career nurses and increase clinical ladder participation rates was an opportunity for the clinical ladder MP. Utilizing CLA mentors to support nurse mentees through the clinical ladder process can assist to retain expert nurses at the bedside. As demonstrated from the evidence review, MPs impact more than just nurse retention and participation rates. MPs improve job satisfaction, patient outcomes, and a healthy work environment (Vaupel-Juart & Herron, 2014; Warman et al., 2016). This project also had the potential to decrease the cost of nurse turnover and recruitment. Finally, with the request from non-nursing departments to implement CLPs, there was potential to create a structured MP within these areas.

Threats. The most significant threat to the QI project was the CLRBs ability to hold the CLA mentors accountable to fulfill their requirements, while sustaining this initiative. During the implementation of the project, the PM provided education and guidance to the CLA mentors. As this project expands to other campuses within the health system, there is a possibility CLA mentors will drift. Another threat was high patient census, which may limit the CLA mentors time to be fully engaged in the mentoring relationship because the leader will be engaged in caring for patients and staff. Lastly, CLAs are nurse leaders functioning in many roles in their departments such as charge nurses, preceptors, or administrative roles leaving them little time to focus on mentoring clinical ladder applicants.

Organizational approval process. In order to implement the clinical ladder MP QI project, the organizational nurse leaders required approval. The PM scheduled and facilitated a meeting with the project site's Chief Nursing Officer (CNO), ACNO, and health system's Administrative Director for CEPD to discuss the project idea, purpose, survey tools, and outcomes. Further discussion entailed nurse turnover rates in nurses with one to three years of experience who are eligible for the clinical ladder but resign to pursue other opportunities. The nurse leaders agreed the QI project would benefit the professional development and growth of CNs, increase clinical ladder participation rates, and improve nurse retention. The CNO met with the health system Chief Nurse Executive for approval of the project. Once final approval was received, the project site's CNO provided a formal approval letter to proceed with the QI project (see Appendix E).

Information technology. The project required minimal information technology since the current clinical ladder application, and the portfolio was in a paper format. The PM offered several in-person CLA mentor educational sessions. The WebEx was provided to those CLAs that were unable to attend in-person. CNIII and CNIV sample portfolios were created, by the PM, and added to the clinical ladder website. The PM administered the MES survey via Qualtrics and emailed the submission link to nurse mentees upon submission of their clinical ladder portfolio.

Cost Analysis of Project Materials

The budget for the clinical ladder MP included food and office supplies for the CLA mentorship educational sessions and sample portfolio binders. An estimated $267.96 was used for food provided at the CLA educational sessions. Office supplies cost $460.61 and were needed for general operation of the program. Three CNIII and three CNIV binders were created

to show CLA mentors' examples of best practice portfolios. An itemized breakdown of the budget is noted in Table 1. The total cost for the QI project was $728.57.

Table 1

Quality Improvement (QI) Project Budget

November 2018 to April 2019			
Line Item	Quantity	Unit Cost	Total
Food			
Drinks	4 cases (24/case)	$9.99	$39.96
Fresh fruit and vegetables	6 large trays	$30.00	$180.00
Candy	6 bags	$8.00	$48.00
Office Supplies			$267.96
Copy paper	4	$6.93	$27.72
HP toner cartridges	2	$158.99	$317.98
Pens	2 packs (36/pack)	$7.49	$14.98
Binders	6	$12.99	$77.94
Sheet Protectors	1 pack (200/pack)	$21.99	$21.99
			$460.61
		TOTAL	$728.57

Note. Explanation of the project budget to implement a Mentorship Program in the clinical ladder at the project site.

Plans for Institutional Review Board Approval

IRB approval was obtained through exemption at the project site (see Appendix F). The PM met with the project site's Research Nurse Scientist to review the IRB application and required documents. After completing the formal application, the PM submitted the document to the Research Nurse Scientist for the appropriate signatures. On September 28, 2018, the IRB application was submitted to the project sites IRB committee for review. After receiving approval from the project site's IRB on November 20, 2018, the application was submitted to East Carolina University's (ECU) IRB committee for review on November 28, 2018. ECUs IRB

committee agreed the doctoral project was deemed non-human research and considered a QI project (see Appendix G).

Plan for Project Evaluation

Demographics. Descriptive statistical analysis was used to describe the demographic data. This data was collected from CNIIs attaining CNIII status and from CNIIIs achieving CNIV status (see Appendix H). The nurse mentees answered questions to disclose age, gender, current CN level, years worked as a registered nurse, and years worked at the project site. The mentees age was reported as a mean and a range was noted. Gender was reported by percent of participants that were male or female. The nurse mentees current CN level was categorized as CNII or CNIII and reported as a percent of participants. The years worked as a registered nurse as of 2018 and years worked at the project site was reported as a mean with a range noted.

Mentorship effectiveness scale. The first defined outcome was to enhance nurse mentee professional development. CLA mentors guided the nurse mentees on completion of the clinical ladder portfolio, patient exemplar, and project. Post-implementation of the clinical ladder MP, nurse mentees completed the MES survey via Qualtrics. Offering a structured MP improves clinical ladder participation and nurse mentee professional growth and development (Mijares, 2018; Vaupel-Juart & Herron, 2014; Warman et al., 2016).

Evaluation tool. Berk, Berg, Mortimer, Walton-Moss, and Yeo (2005) noted the MES is a 12-item self-report measure designed to assess the overall mentor's behavioral characteristics (see Appendix A). The MES used a six-point Likert-type scale (0 = strongly disagree to 6 = strongly agree) or not applicable if item did not apply (Berk et al., 2005). Therefore, the total score for all 12-statements could range from 0 to 60. The ratings were presented by the total

score of all 12-statements for interpretation using qualitative ratings to understand the CLA mentor's effectiveness (Berk et al., 2005).

***Data analysis*.** The MES survey was used to evaluate the CLA and nurse mentee relationship and experience. In some instances, a CLA mentor was assigned to two to three nurse mentees. The analysis included comparing aggregate MES scores for each nurse mentee that submitted a clinical ladder portfolio on February 1, 2019 or May 2, 2019. Using descriptive statistics, the PM showed the participant groups total sum, mean, and range. The targeted benchmark for the MES was a total sum score of 48-60 for each CLA mentor. The PM utilized the Qualtrics Survey software to collect the participant MES survey data. Microsoft Excel was used for data management, and quantitative statistical analysis was conducted via SPSS software programs.

Participation rate. The second defined outcome of the project was to increase clinical ladder participation rates. The PM collected the total number of CNIIs promoted to CNIII status and CNIIIs promoted to CNIV status. Nurses feel a sense of accomplishment and grow professionally from participating in a CLP (Zehler et al., 2015).

Evaluation tool. The PM self-created an Excel spreadsheet titled *Project Site Clinical Ladder Participation Data Record* (see Appendix I) to collect and track clinical ladder participation rates. This form included the fiscal year (FY) and quarter, the date of the CLRB, and the total number of portfolios submitted, a total number of CNIII and CNIV portfolios submitted, and the percent of CNIII and CNIV portfolios submitted.

Data analysis. The current project site clinical ladder participation rate for CNIIs (n = 345) and CNIIIs (n = 56) advancing is 5.5% for FY18. After the CNII and CNIII nurse mentees completed the MP, they submitted their portfolios to the CLRB for review in February or May

2019. The project site's clinical ladder nurse mentee participation rate baseline data for FY18 quarter three was 1% (*n*=4) and quarter four was 1% (*n*=5) were obtained and compared to post-intervention data for FY19 quarter three and four. The targeted internal benchmark determined by the CNO for FY19 quarter three and four was to increase clinical ladder participation to 3% (*n*=12) nurse mentee clinical ladder advancements for the project site.

Data management. The PM stored data in two locations. The primary storage location was the project sites, Box Sync secure cloud-based password protected storage system. The data that was stored on the cloud-based system included nurse mentee completed demographic survey results, the *Project Site Clinical Ladder Participation Data Record*, MES Qualtrics survey reports (completed by the nurse mentees), and data derived from the MES survey. The second data storage location was password protected Qualtrics Survey software. The MES and demographic survey results were kept in Qualtrics and also saved to the project site's secure Box Sync cloud-based storage system. No hard copies of data were obtained during the project. All digital data will be kept for five-years and deleted, by the PM, from the secure cloud and Qualtrics at the end of this period.

Summary

In conclusion, patient outcomes and quality of care continue to suffer in many organizations as nursing turnover rates soar. Many organizations utilize CLPs as a tool to retain talented nurses. However, evidence shows clinical ladder participation rates are low due to various reasons, which impact nursing professional development and growth. Implementing a structured MP within a clinical ladder enhances the professional development of early to mid-career nurses and increases clinical ladder participation rates. Through project management

operations of planning, organizing, and control, the clinical ladder MP chances of success rise. The next chapter provides a detailed implementation plan for the clinical ladder MP.

Chapter Five: Implementation Process

The clinical ladder mentorship program (MP) introduced a standardized method of supporting and guiding nurses interested in pursuing career advancement. Mentoring helps nurses develop and refine interpersonal skills, improve productivity, and job satisfaction (Lafleur & White, 2010). The purpose of this chapter is to outline the step-by-step process of how the evidence-based practice (EBP) project was implemented at the project site.

Setting

The clinical ladder MP was implemented at a 186-bed not-for-profit community hospital in eastern North Carolina. As part of a more extensive health system, this hospital has served the county for over 35 years offering a comprehensive array of services such as cancer, orthopedic, spine, cardiovascular, neurosciences, digestive care, wound healing, outpatient imaging, same-day surgery, emergency services, and community outreach programs. The hospital employs 1,825 employees. The EBP project focused on the clinical nursing ladder but specifically on the Clinical Nurse (CN) IIs advancing to CNIII status and CNIIIs advancing to CNIV status. There are 537 Registered Nurses (RNs), which makes up 34% of the workforce. Of the 537 RNs, 87 (16%) are CNIs, 345 (64%) are CNIIs, 56 (10%) are CNIIIs, and 49 (9%) are CNIVs.

Participants

The clinical ladder MP consisted of several CNIVs and all inpatient and outpatient Clinical Team Leads (CTLs), and Nurse Managers (NMs) that work in various settings throughout the hospital. The Project Manager (PM) and Clinical Ladder Chair identified CNIV CLAs with project outcome experience, Bachelors of Science in Nursing (BSN) or higher, and a positive recommendation from their direct report to participate in the training. The Associate Chief Nursing Officer (ACNO) required all CTLs and NMs to attend the clinical ladder

mentorship training since they provide clinical ladder guidance and support for CNs. The mentorship course trained 25 attendees. There were no restrictions on age, gender, or ethnicities.

Recruitment

The Clinical Ladder Chair and PM reviewed the current list of CNIVs, CTLs, and NMs on October 22, 2018. The ACNO required all CTLs and NMs to attend the CLA mentorship training. From the list, the PM and chair identified and chose CNIVs with project outcome experience, held a BSN or higher, and a positive recommendation from their direct supervisor. The PM sent an email on December 13, 2018, to select CNIVs, CTLs, and NMs explaining the EBP project and inviting them to the mentorship training sessions. The email also included the mentorship training dates, times, locations, and course registration number. The PM requested the team to register for a class using the API course scheduling system by December 29, 2018. An email reminder was sent on December 21, 2018, to the same group reminding them to register for the mentorship training course. The PM also met individually with several nurse leaders to provide more details about the project and clinical ladder MP.

Implementation Process

The implementation process includes a detailed step-by-step account of the EBP project. This information can further assist nurse leaders to replicate the project at another facility. The clinical ladder MP execution began on January 7, 2019.

Scheduling. The PM selected seven dates and times for the clinical ladder mentorship training sessions to be held on the hospital's campus. Conference rooms were requested and approved. The PM sent an email describing the EBP project to the CNIVs, CTLs, and NMs, as well as, the dates, times, and location of each clinical ladder mentorship training session. The PM emailed the course registration number to the participants to register for the course.

Mentorship session. Select CNIVs and all CTLs and NMs at the project site were invited to attend the clinical ladder mentorship training sessions. The sessions were scheduled for three weeks and the times of day varied to accommodate nurse leaders' schedules. Each workshop lasted four hours. At the beginning of each training session, the PM provided objectives and an overview of the EBP project. The PM used a PowerPoint slide presentation to educate participants about the qualities of a successful mentor, quality communication, giving feedback, a review of the nursing clinical ladder policy, application process, and professional portfolio. Clinical ladder portfolio examples were also provided during the training sessions. In addition, the team was educated that CNIIs and CNIIIs submitting a clinical ladder portfolio received the Mentorship Effectiveness Scale (MES) survey, as noted in Appendix A, to evaluate the effectiveness of the CLA mentorship experience and individuals mentoring. At the end of the session, the CLA mentors completed a program evaluation to help the PM improve future training sessions.

Clinical ladder advisor mentor and nurse mentee. After the clinical ladder mentorship training was completed, NMs emailed the Clinical Ladder Chair the nurse mentees names they support advancing on the clinical ladder. The Clinical Ladder Chair assigns nurse mentees to CLA mentors who work in the same or similar service lines. Example portfolios were available to show CLA mentors and nurse mentees what information was required for a successful clinical ladder portfolio. CLA mentors met with nurse mentees bi-weekly via email, text, or in-person to assist with the clinical ladder paperwork and questions over one to two months for nurse mentees pursuing CNIII status and two to four months for nurse mentees seeking CNIV status. After submitting the clinical ladder binder on February 7, 2019, or May 16, 2019, the nurse mentee completed the Qualtrics Nurse Mentee Demographic Survey (see Appendix H) and the MES

survey to evaluate the effectiveness of the CLA mentor experience. Data from the demographic and MES surveys were collected and stored using Qualtrics and downloaded to Box Sync, the organization's password protected cloud-based file storage site. The PM analyzed the data to assess for CLA mentorship effectiveness and increase clinical ladder participation. Data will be maintained for five years (until August 1, 2024) to allow for publication.

Plan Variation

In the project timeline, the PM wanted to implement the clinical ladder MP project on November 1, 2018, so CLA mentors would guide and support nurse mentors at least three months before submitting their portfolios in February 2019 Clinical Ladder Review Board (CLRB) due date. However, at the beginning of 2018, the project site implemented a new Institutional Review Board (IRB) software system. The new system added additional steps and a learning curve for the IRB review committee. The PM expected to have IRB approval on October 26, 2018 but did not receive notification until November 20, 2018. Therefore, the PM was able to change the implementation start date to January 7, 2019.

In addition to the new IRB software system, the PMs Executive leadership team (ELT) launched a new Quality Management System (QMS) initiative mid-November 2018. The ELT required all CTLs and NMs to participate in three days of QMS training sessions from December 17, 2018 to January 10, 2019. As a result, the PM had to push back the CLA mentor training sessions to the first three weeks in January 2019.

In past years, the clinical ladder due dates was the end of February, May, August, and November each year. During the September 6, 2018, CLRB meeting, the team discussed the delays in newly promoted nurses receiving their promotion pay. Therefore, the team decided to change the due dates to coincide with the payroll. As a result, the clinical ladder portfolio due

dates were moved to the beginning of the month for February, May, August, and November 2019. This change impacted the PMs project outcomes because the first clinical ladder due date was February 2, 2019, as opposed to the end of February.

Summary

The clinical ladder MP offers an approach to improve the process, increase participation and professionally grow bedside nurses (Mijares, 2018; Vaupel-Juart & Herron, 2014; Warman et al., 2016). The CLA mentors supported and guided the nurse mentees through the clinical ladder progression from application to completion. By providing guidance and examples of portfolios ensures successful completion of the Clinical Ladder Program and career advancement (Warman et al., 2016). Data was collected and analyzed in the next chapter to illustrate the implementation effectiveness of the CLA mentor project.

Chapter Six: Evaluation of the Practice Change Initiative

The evidence-based practice (EBP) clinical ladder mentorship program began with a data analysis review of nurse turnover and clinical ladder participation, the non-existent role structure for the Clinical Ladder Advisor (CLA) mentor, inaccuracies in the clinical ladder policy, and financial impact to the project site. After reviewing the data and obtaining feedback, the project committee agreed a change was needed to standardize the Clinical Ladder Program (CLP) at the project site. Through an extensive literature review (see Appendix C), the project manager (PM) determined that establishing a clinical ladder structured mentorship program (MP) and using the CLA mentor as the guide improves nurse mentees professional development and increases participation rates. This chapter summarizes the participant demographics, project data, and discusses the intended outcomes of the EBP clinical ladder MP project.

Participant Demographics

The nurse mentees that completed the Mentor Effectiveness Scale (MES; see Appendix A) survey yielded a sample of nine ($N = 9$). The range of participants' ages was 27 – 51 years old ($\underline{x} = 38$; see Figure 5). The nurse mentees genders were: male 11% ($n = 1$) and female 89% ($n = 8$; see Figure 6). Seventy-eight percent ($n = 7$) of the participants were pursuing Clinical Nurse (CN) III status, and 22% ($n = 2$) were pursuing CN IV status (see Figure 7). In December 31, 2018, the nurse mentees years worked as a Registered Nurse (RN) range was two to 28 ($\underline{x} = 12$; see figure 8), and years worked at the project site was two to 18 ($\underline{x} = 7$; see Figure 9).

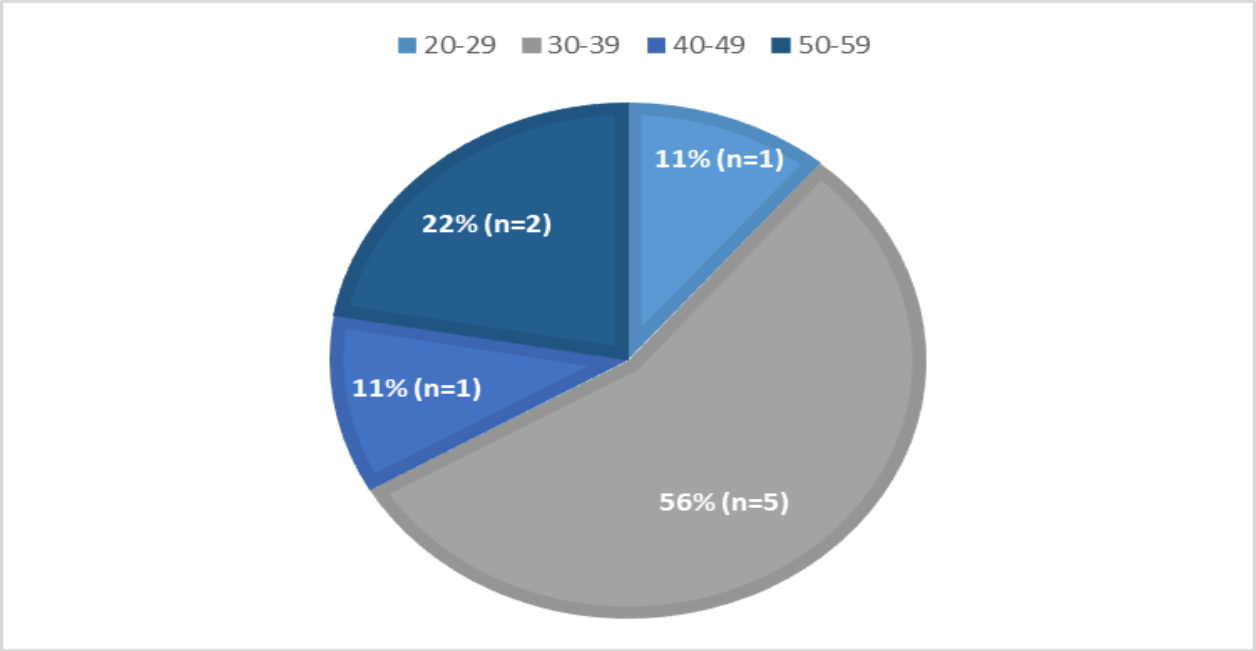

Figure 5. Percent by age range of nurse mentees.

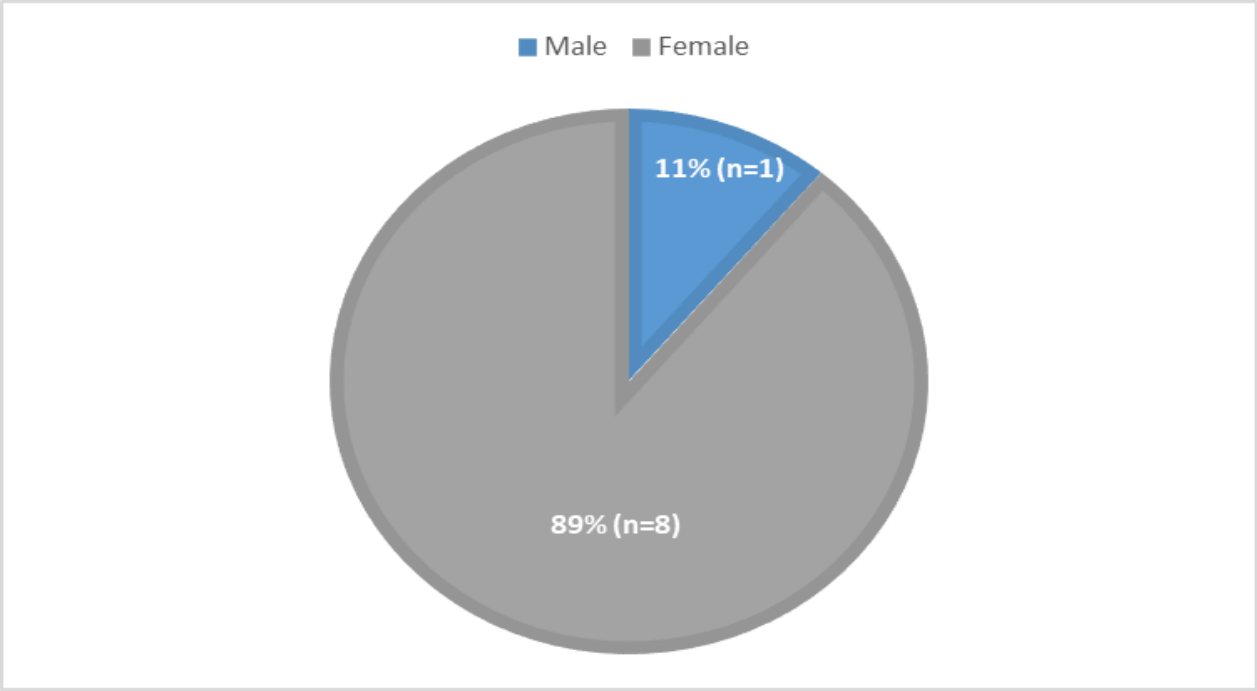

Figure 6. The percent by gender of nurse mentees.

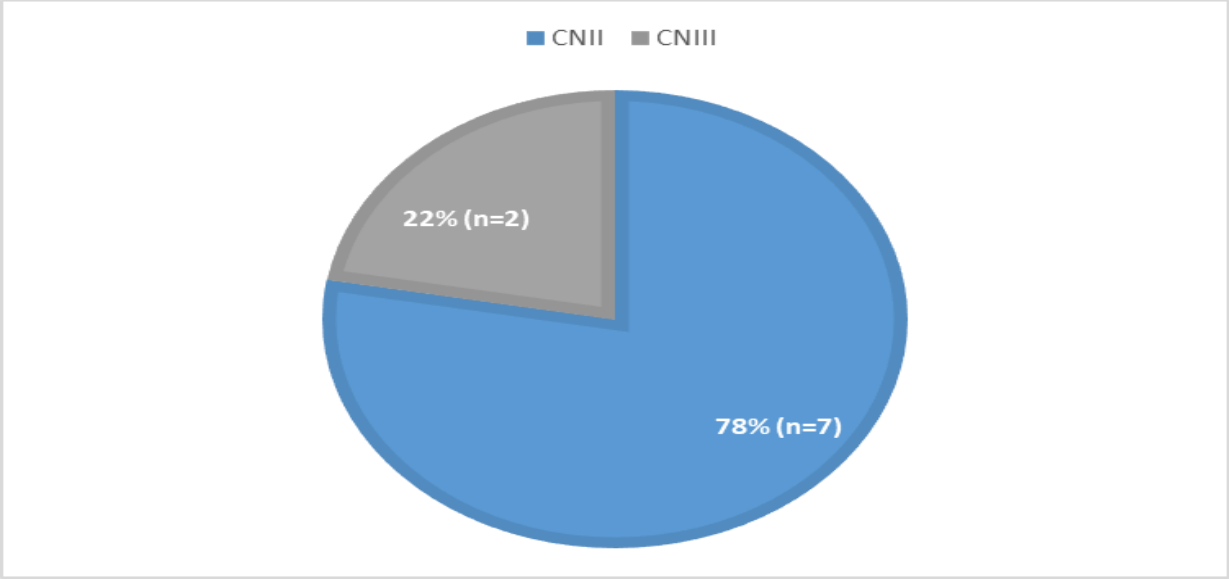

Figure 7. Percent of nurse mentees current clinical ladder status before submitting a portfolio to advance.

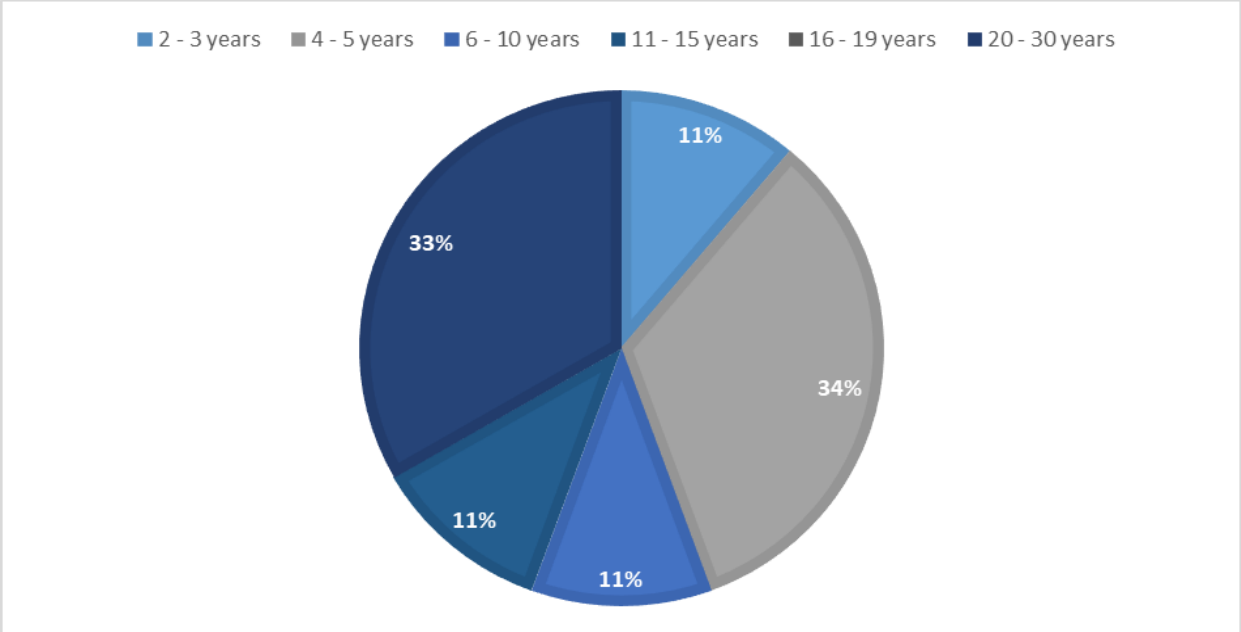

Figure 8. Percent of nurse mentee years worked as a Registered Nurse (RN).

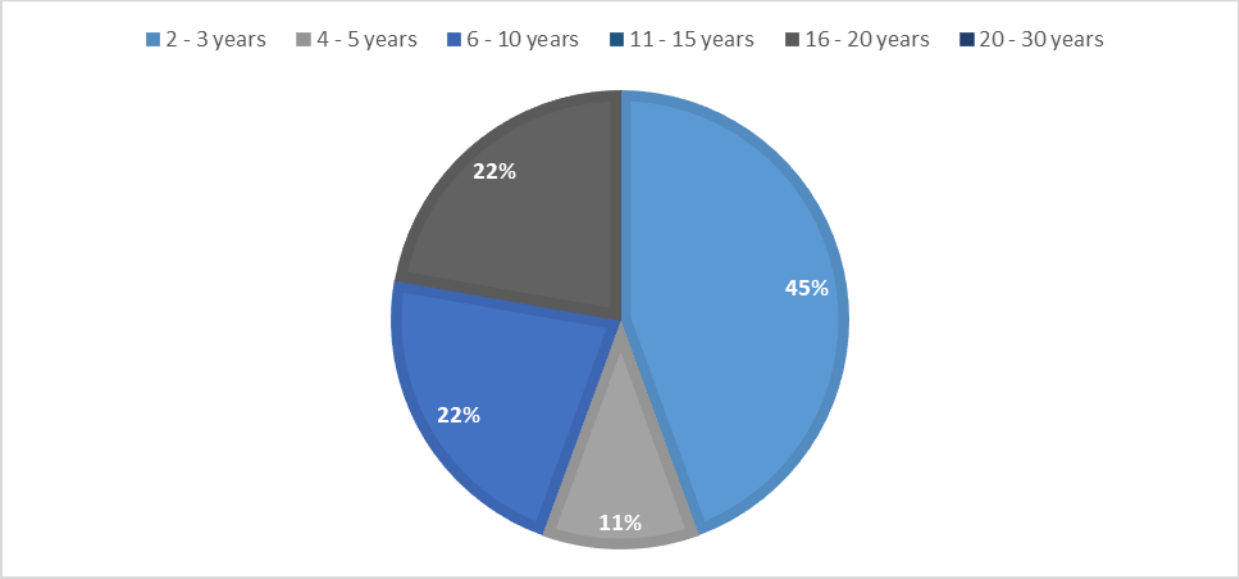

Figure 9. Percent of nurse mentee years worked as a Registered Nurse (RN) at the project site.

Intended Outcomes

Mentorship effectiveness scale and clinical ladder mentorship program. The first defined outcome from the project was to enhance nurse mentee professional development through the CLP. The project site lacked a structured clinical ladder MP and clear expectations and formal training for the CLA mentors. Nurse mentees were given an MES survey after submitting their clinical ladder portfolio. The target benchmark on the MES survey for an effective mentor was 48 to 60 (Berk, Berg, Mortimer, Walton-Moss, & Yeo, 2005). The PM exported the survey results from Qualtrics to SPSS statistical analysis software for assessment.

Participation rate. The second defined outcome was an increase in clinical ladder participation rates post-implementation of a structured CLA MP. The PM collected and documented the number of CN IIs promoted to CNIII status, and CNIIIs promoted to CNIV status using the *Project Site Clinical Ladder Participation Data Record* (see Appendix I). The internal benchmark established by the project sites Chief Nursing Officer (CNO) was to increase the nurse mentee clinical ladder advancements to 3% (n=12).

Findings

Mentorship effectiveness scale. In January 2019, CLA mentors attended formal training to guide nurse mentees how to complete the clinical ladder portfolio, patient exemplar, and project. On December 1, 2018, and March 1, 2019, the nurse mentees notified their Nurse Managers (NM) to declare their intent to pursue the clinical ladder advancement. After the nurse mentees submitted their portfolios by the due date, they received the MES survey via a Qualtrics link from the PM. The MES survey tool was used to assess the overall CLA mentor and nurse mentee relationship and experience (MES: see Appendix A). One hundred percent (N = 9) of the nurse mentees completed the MES survey. The targeted benchmark for the MES survey was a total sum of 48 – 60 (Berk et al., 2005) for each CLA mentor. The MES range was 56 – 60 and the MES mean score for the nine MES surveys was 59. All nine of the nurse mentees rated their CLA mentors within the targeted benchmark of 48 – 60, as noted in Figure 10.

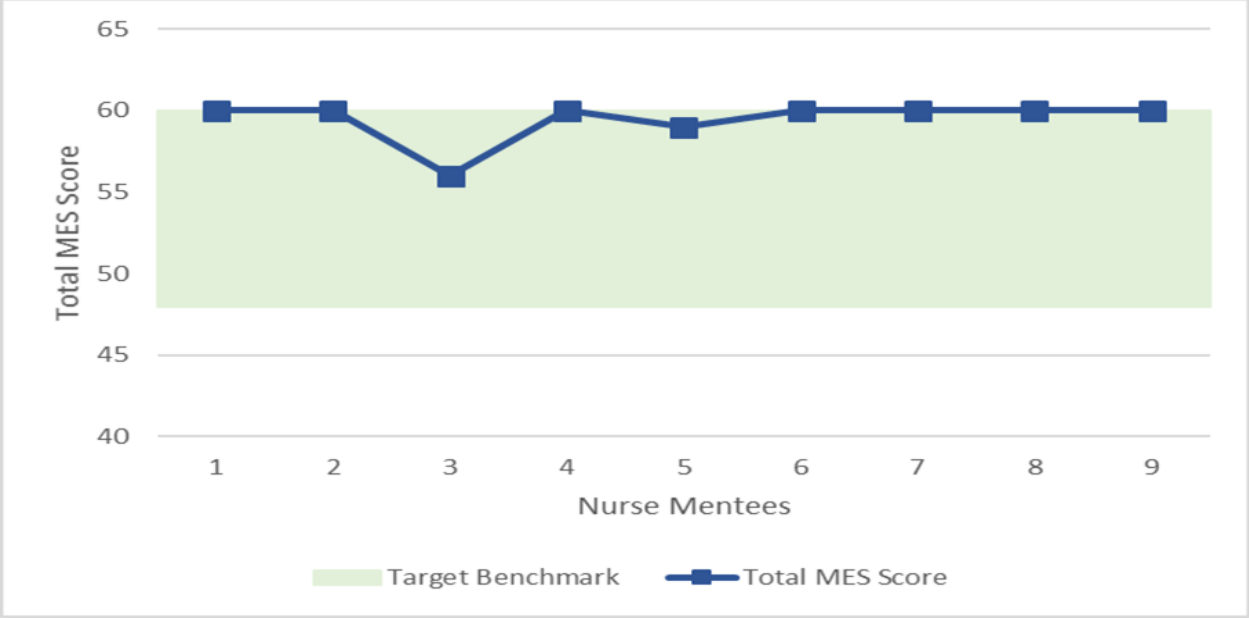

Figure 10. Total Mentorship Effectiveness Scale (MES) Score for each Nurse Mentee compared to target benchmark of 48-60.

An unanticipated outcome noted for this project was the number of hours spent by the Clinical Ladder Review Board (CLRB), including the Clinical Ladder Chair correcting and contacting nurse mentees about their portfolios for the project site's additional two hospitals. Eight (89%) out of the nine clinical ladder portfolios at the project site were complete and did not require additional information. However, one nurse mentee's portfolio from the project site was missing a charge nurse and communication class; therefore, was denied her promotion. An observation noted in this situation was the CLA mentor assigned to this nurse mentee did not attend the PM's CLA mentor training sessions and was not prepared to advise their mentee appropriately.

In February and May 2019, the CLRB spent a total of 92 hours (46 hours per review board cycle) correcting and contacting nurse mentees for incomplete forms or additional documentation necessary to be promoted. The Clinical Ladder Chair and three CLRB members worked on rectifying portfolios and contacting nurse mentees for additional information at the two other hospitals. At the average salary of $30 per hour, the additional time spent away from the CLRB member's daily responsibilities cost the organization $11,040. During both CLRB sessions, the Clinical Ladder Chair reiterated the need for the structured clinical ladder MP to be implemented system-wide.

Participation rates. Five nurse mentees declared to pursue the clinical ladder in December of 2018, and 10 nurse mentees declared to pursue the clinical ladder in March of 2019. However, in February 2019, 60% (n = 3) of the nurse mentees submitted portfolios, and in May 2019, 60% (n = 6) of the nurse mentees submitted portfolios to the CLRB. The nurse mentees (40%; n = 6) that did not submit portfolios by the due dates cited the project site's Quality Management System (QMS) demands and personal reasons as the rationale for why they

did not seek clinical ladder advancement. Of the nine clinical ladder portfolios submitted, 67% (*n* = 6) of the nurse mentees were promoted from a CNII to a CNIII status, 22% (*n* = 2) were promoted from a CNIII to a CNIV status, and 11% (*n* = 1) was denied due to failing to attend two required classes.

The targeted internal benchmark decided by the project site's CNO for fiscal year (FY) 2019 was to increase clinical ladder participation rate from 2% (*n* = 8) to 3% (*n* = 12). The project site employs 345 CNIIs and 56 CNIIIs that are eligible to advance on the clinical ladder. In FY18, the nurse mentee participation rate during quarter three was 1% (*n* = 4), and in quarter four was 1.2% (*n* = 5). Post-implementation of the CLA MP, the nurse mentee participation rate during FY19 quarter three was 0.7% (*n* = 3) and quarter four was 1.5% (*n* = 6) for a total participation rate of 2.2%, as noted in Figure 11. The project did not meet the internal benchmark of 3% (*n* = 12) additional promotions established by the CNO and the number of portfolios submitted remained relatively flat.

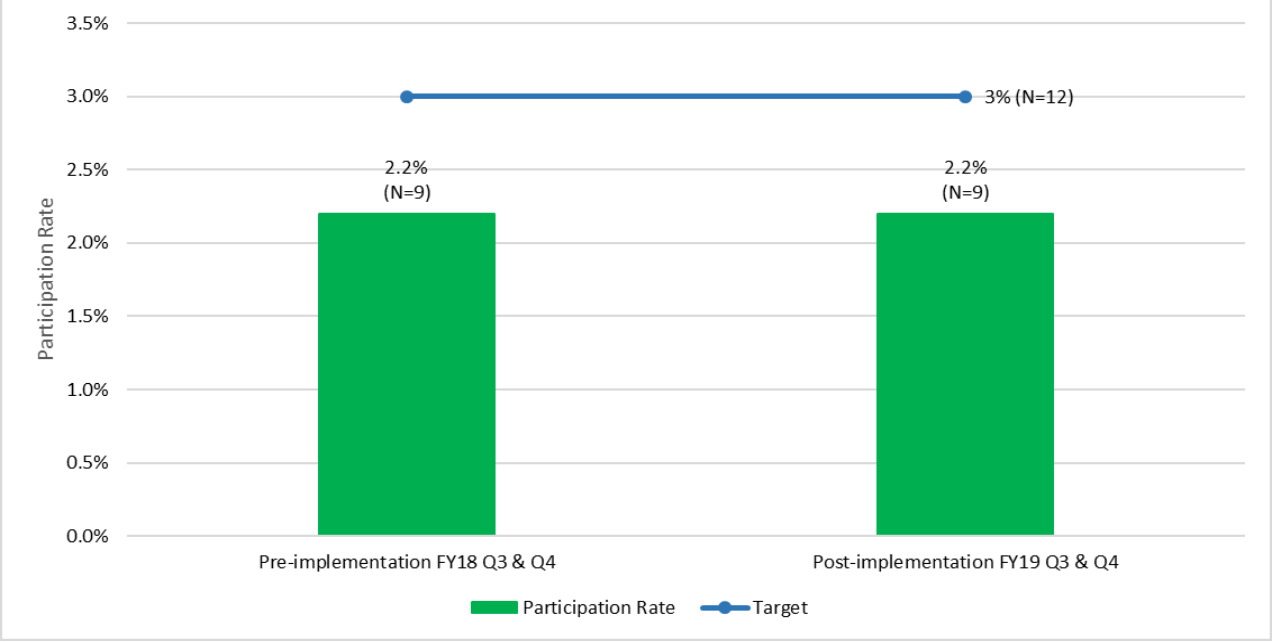

Figure 11. Percent of clinical ladder participation rate by fiscal year (FY) and quarter (Q).

Summary

The projects first defined outcome was to enhance the nurse mentees professional development by participating in the project site's clinical ladder structured MP. The nurse mentees assessed the effectiveness of their CLA mentors by completing the MES survey. This outcome was met by 100% (N = 9) of the nurse mentees that completed the survey and scored the CLA mentors ranging from 56 to 60, which meets the MES target total benchmark score of 48 to 60. The second outcome the PM assessed was to increase clinical ladder participation rates through a structured clinical ladder MP. The target benchmark was set at 3%, and the project's participation rate was 2.2% during FY19 quarter three and four. The project did not meet the participation rate target goal for this outcome due to other competing priorities at the hospital. The data analysis and results for this project will lead to alternative practice suggestions and future implications of the clinical ladder MP. These implications are described in the next chapter.

Chapter Seven: Implications for Nursing Practice

Healthcare is a challenging environment filled with an uncertain future of reimbursement and increasing demands in services and regulation. As the complexity of care increases in hospitals, a clinical doctorate in nursing was created to prepare nurses to improve health outcomes in care settings and optimize the delivery of health care. The American Association of Colleges of Nurses (AACN; 2006) outlined eight foundational competencies in *The Essentials of Doctoral Education for Advanced Nursing Practice* to prepare the Advanced Practice Registered Nurse (APRN) and executive leader for practice learning experiences (AACN, 2006). These core Doctorate of Nursing Practice (DNP) Essentials guided the clinical ladder mentorship program (MP) evidence-based practice (EBP) project. This chapter illustrates how the DNP Essentials were applied to the clinical ladder MP and discusses future practice implications.

Practice Implications

The DNP Essentials provide the underpinning for the degree. DNP scholars use knowledge to translate into their practice environments, which improve clinical practice and optimizes health outcomes (AACN, 2006). As doctorally prepared nurses implement EBP projects, the DNP Essentials serve as a foundational guide. Based on the project's findings, the DNP prepared nurse constructed meanings from the conclusions, which may guide practice implications for future endeavors.

Essential I: Scientific underpinnings for practice. DNP programs prepare graduates to translate a variety of sciences, theory, and knowledge to develop new evidence-based strategies and practices in the clinical environment (AACN, 2006). Using the scientific underpinnings, frameworks, and theories to guide the practice, the project manager (PM) conducted a literature review about clinical ladder MPs. The literature showed the clinical

ladder, and MPs retain nurses and improve patient care in the workplace (Mijares, 2018; Vaupel-Juart, & Herron, 2014; Warman, Williams, Herrero, Fazeli, & White-Williams, 2016). The project site utilizes Benner's Theory Novice to Expert as the practical framework for the Clinical Ladder Program (CLP). Benner's Theory consists of five levels of proficiency: novice, advanced beginner, competent, proficient, and expert (Paplanus, Bartley-Daniele, & Mitra, 2014). The project site's clinical ladder is a four-tiered progression and associates novice with a clinical nurse (CN) I, competent with a CNII, proficient with a CNIII and expert with a CNIV.

Future implications for the project site would be to realign the clinical ladder model with Benner's five levels of proficiency by adding a CNV position called the master nurse. The CNV master nurse holds a Master's of Science in Nursing degree or is currently enrolled, a chair or leads a shared governance council or taskforce or demonstrates system-based leadership experience (Virginia Commonwealth University Health, 2019). Adding a CNV on the clinical nursing ladder offers master nurses an opportunity for professional development while retaining advanced knowledge and experience at the bedside (Virginia Commonwealth University Health, 2019).

Essential II: Organization and systems leadership for quality improvement and systems thinking. DNP graduates must be proficient in coordinating quality improvement (QI) teams and driving changes at the organizational level (AACN, 2006). Also, these DNP leaders practice system thinking, business, and financial acumen to analyze practice quality and costs (AACN, 2006). As the project site embarks on a commitment to zero harm for patients via the Quality Management System (QMS), CNIs through CNIVs will participate in or lead QI projects. The project site uses various QI methods and tools. The practice implication for the organization is to adopt the Plan, Do, Study, Act (PDSA) as the QI tool of choice. The PDSA

cycle is a structured experimental approach that tests an intervention quickly and allows new ideas to be built into the process if problems arise during the pilot (Taylor et al., 2014).

The QMS QI projects currently cannot be used by CNs as their clinical ladder project. Future implications include allowing CNs pursuing the advancement to utilize their QMS QI projects for the clinical ladder, standardizing the PDSA tool for clinical ladder projects, training the CNIs through IVs and Clinical Ladder Advisors (CLA) mentors how to use the tool. Providing CNs ongoing opportunities for professional development reflects how nurses view their work and ensure patient safety and quality care (Skela-Savic & Kiger, 2015).

Essential III: Clinical scholarship and analytical methods for EBP. DNP prepared graduates can translate existing research and QI findings into practice, disseminate new knowledge, and evaluate outcomes (AACN, 2006). The research supported that clinical ladder MPs foster professional development and retain nurses within the organization (Zehler et al., 2015). The clinical ladder MP was implemented to guide nurse mentees through the clinical ladder process.

Although the PM encountered competing priorities during the implementation phase of the project and clinical ladder participation remained flat, the nurse mentees that submitted a completed portfolio were promoted to the next level. The implication for practice is to roll out the project to the other hospitals in the health system and continue to evaluate outcomes. In addition to tracking clinical ladder participation rates and surveying nurse mentees about the effectiveness of the CLA mentor, the literature supports measuring nurse retention by the department for the health system (Mills & Mullins, 2008; Vergara, 2017).

Essential IV: Information systems/technology and patient care technology for the improvement and transformation of healthcare. The DNP graduate demonstrates and

understands the principles to select and choose the appropriate information technology (AACN, 2006). As new problems arise in the organization, the DNP graduate is trained to evaluate new innovative technology that can be incorporated into nursing practice (AACN, 2006). Nurse mentees pursuing clinical ladder advancement collate paper documents such as licensure, continuing education credits, and college degrees to insert in the portfolio as proof of completion. If the nurse mentee is advancing to a CNIV, a hard copy of the QI project is also inserted into the portfolio.

As the project site continues to revise the CLP, a future implication is transitioning to an electronic portfolio or e-portfolio. The e-portfolio is a living document that allows nurses to capture their work real-time and be able to share the information with recruiters and future employers real-time (Dion, 2008). According to Dening, Holmes, and Pepper (2018), e-portfolio is evidence of the nurse's academic and professional achievements. Cloud-based e-portfolios enable the nurses to collate learning activities, including the ability to upload digital documents and media files (Dening et al., 2018; Dion, 2008). Transitioning to an e-portfolio system not only benefits the organization but allows the nurse the ability to quickly and precisely demonstrate learning and professional competence.

Essential V: Healthcare policy for advocacy in healthcare. The DNP graduates are prepared to design, impact, and implement healthcare policies that outline health care financing, safety, quality at all levels of the organization. These DNP leaders also provide a critical interface between practice research and policy (AACN, 2006). At the project site, the nurse vacancy rate averages 26% over three years, resulting in a 12.6 million-dollar financial loss. The literature confirms that the clinical ladder MP not only enhances nurses professional development but is used as a recruitment and retention tool (Drenkard & Swartwout, 2005). The

clinical ladder MP was implemented in a community hospital, which is part of a three-hospital system. The future implication is to implement this project to the rest of the health system, including the ambulatory care setting. Drenkard and Swartwout (2005) noted that the nurses that participated in the CLP were retained in the organization, and there were notable costs savings due to a decrease in nursing turnover.

A long-term implication for the CLP is redesigning the program. The current evidence-based literature shows CLP names are changing to Clinical Advancement Programs (CAP) and are more aligned with the Quality and Safety Education for Nurses (QSEN) competencies and proposed targeted knowledge, skills, and attitudes (KSAs; Burke, Johnson, Sites, & Barnsteiner, 2017). The QSEN competencies include continuous quality improvement, evidence-based practice and research, leadership, patient and family-centered care, professionalism, safety, teamwork, and technology, and informatics (Burke et al., 2017). Incorporating these competencies with an emphasis on quality and safety with the associated KSAs into a CLP framework will also align with the project site's QMS initiative.

Essential VI: Interprofessional collaboration for improving patient and population health outcomes. Delivering health care has become increasingly complex and requires a collaborative effort among multiple professions. DNP prepared leaders to play a crucial role in creating and leading multidisciplinary teams and working with members from various backgrounds and experiences (AACN, 2006). The current clinical ladder MP uses a standardized Qualtrics survey to assess nurse mentee's peer feedback but lacks consistency for the portfolio review process. The Qualtrics report provides results including a graph, the count, mean, standard deviation, and variance for each question. A future implication for the clinical ladder MP would be to create a standardized portfolio review process that includes a minimum of three

clinical ladder members to review, a standardized checklist, and written feedback to the nurse mentee (Burke et al., 2017; Kaiser Permanente, 2018; PennState Health, 2019).

Essential VII: Clinical prevention and population health for improving the nation's health. DNP graduates engage in leadership to incorporate EBP prevention practices into the community (AACN, 2006). These nurse leaders are positioned to implement and evaluate care delivery and identify health care gaps in individuals and populations (AACN, 2006). The clinical ladder MP requires nurse mentees to pursue academic progression and obtain a certification. Although having an advanced degree and certification improve patient outcomes, the current CLP requirements do not include a focus on the patient and family-centered care. Revising the CLP to align CNIs through CNIVs offers a useful framework for advancement programs (Burke et al., 2017). Implementing a competency-based CLP provides an EBP foundation and prepares nurses to deliver higher quality care, improve patient outcomes, and decrease errors (Burke et al., 2017; Fardellone, Musil, Smith, & Click, 2014; Hossli, Start, & Murphy, 2018).

Essential VIII: Advanced nursing practice. As healthcare becomes progressively multifaceted and demanding, the DNP graduate is prepared to practice in an area of specialization within a larger domain of nursing (AACN, 2006). While partnering with other professionals, the DNP graduate supports and mentors nurses to achieve nursing excellence. The clinical ladder MP was designed to support the nurse mentee through their career progression ladder.

After expanding the MP throughout the health system, including ambulatory care settings, the next step would be to design a CLP for Advanced Practice Providers (APPs). Currently, the health system does not have a program to recognize and reward APPs or promote retention. APPs roles continue to evolve to meet healthcare needs. A CLP would support and

recognize the APPs for the responsibilities they have already assumed, such as leading QI projects, administrative tasks, EBP, and policy development (Paplanus et al., 2014).

Summary

Healthcare is a highly fragmented, chaotic, and complex industry. The DNP is a clinical doctorate that prepares APRNs and senior nursing leaders to tackle quality, efficiencies, and effectiveness in these multifaceted health care systems. The AACN (2006) DNP Essentials serve as the infrastructure for doctorally prepared nurses to possess advanced competencies, enhance knowledge to improve practice and patient outcomes and expand leadership skills. This chapter highlighted how each DNP Essential aligned the clinical ladder MP and discussed future practice implications for the project.

Chapter Eight: Final Conclusions

The clinical ladder mentorship program (MP) evidence-based practice (EBP) project was implemented to enhance professional development in early to mid-career nurses and increase clinical ladder participation rates at a 186-bed community hospital. Clinical Ladder Programs (CLPs) are used to attract and retain experienced nurses at the bedside, foster professional development, and improve patient outcomes (Pierson, Liggett, & Moore, 2010; Warman, Williams, Herrero, Fazeli, & White-Williams, 2016). This chapter summarizes the significance of the clinical ladder MP project findings, strengths, limitations, benefits, and future recommendations for practice.

Significance of Findings

The clinical ladder MP outlined a structured process for the Clinical Ladder Advisor (CLA) mentors to guide nurse mentees through the application process. Each nurse mentee completed the Mentorship Effectiveness Scale (MES) survey (see Appendix A) after submitting a clinical ladder portfolio. The survey results showed the CLA mentors were useful in guiding the nurse mentees through the clinical ladder process, and the benchmark score of 48 – 60 was achieved.

Since the implementation of the clinical ladder MP, a total of 15 nurse mentees declared intent to pursue career advancement. However, six out of the 15 nurses chose to submit their portfolio at a later date. The overall participation rate remained flat at 2.2% (N=9) from Fiscal Year (FY) 2018 quarter three and four to FY2019 quarter three and four. As a result, the project did not meet the targeted internal benchmark of 3% (*n*=12). However, 89% (n = 8) of the nurse mentees were promoted to a higher clinical ladder tier, and 11% (*n* = 1) were denied due to failing to meet the clinical ladder requirements. An important finding to note was the nurse

mentee that was denied a promotion, was assigned to a CLA mentor that did not attend the formal CLA mentor training sessions.

Lastly, an unanticipated outcome noted was the hours spent by the Clinical Ladder Review Board (CLRB) members correcting nurse mentee portfolios at each review cycle. In February 2019 and May 2019, a total of 92 hours was spent by CLRB members contacting and correcting nurse mentees portfolios from the other two hospitals. Spending additional time correcting portfolios cost the organization roughly $11,000 and time away from performing their daily responsibilities.

Project Strength and Limitations

Designing a new program is both daunting and challenging. Based on the MES survey results, nurse mentees found the CLA mentors useful in guiding them through the clinical ladder progression. Anecdotal reports from the CLA mentors and nurse mentees have also been overwhelmingly positive. The CLA mentors feel more prepared to assist nurse mentees on the career ladder journey, and nurse mentees felt supported through the process. Eight out of nine nurse mentee participants were promoted to a higher clinical ladder tier.

The two initiatives that limited the clinical ladder MP was the new Institutional Review Board (IRB) software, and the implementation of a Health System commit to zero harm program known as the Quality Management System (QMS). In October 2018, the Health System upgraded the IRB software program. There was a significant learning curve for end-users causing delays in IRB project approvals and denials. As a result, there was a delay in the IRB approval, which postponed the clinical ladder MP implementation date to December 2018. In December 2018, the project site's Executive Leadership Team (ELT) launched a commitment to zero harm initiative. The program required mandatory training for staff nurses and nursing

leaders in January 2019. This initiative caused a further delay in the implementation of the project because staff nurses were required to attend the QMS training; therefore, delayed their clinical ladder portfolio submission dates to Summer 2019.

Project Benefits

The clinical ladder MP implementation undeniably benefited the project site. Many nurse leaders at the project site find the clinical ladder process confusing. The CLA mentors, clinical team leads, and nurse managers appreciated the project establishing the CLA mentors role, responsibilities, and expectations, as well as, revising the clinical ladder policy and simplifying the clinical ladder application. The nurse's mentees, who were assigned to trained CLA mentors, portfolios were completed in its entirety. Without the clinical ladder MP, the CLRB would have spent countless hours modifying portfolios.

Recommendations for Practice

There were several practice implications identified as next steps for the clinical ladder MP. The clinical ladder mentorship training course will be offered to all CLA mentors in the health system. After current CLA mentors are trained, the mentorship training course must be offered more frequently as the program expands, with a need of three times per year. Additionally, follow up classes should be offered for existing CLA mentors when there are revisions to the CLP. The project manager (PM) will continue to track clinical ladder participation rates and administer the MES survey to nurse mentees to evaluate the effectiveness of the CLA mentor. After expanding the MP to the additional sites, the PM will monitor nurse retention rates by hospital and department, as well as, the nurses participating on the clinical ladder. After collecting data for 12 to 18 months, the PM will submit an abstract to the American Organization for Nurse Leaders conference and write a manuscript for publication.

Final Summary

The initial outcomes have shown a promising trend that supports the implementation of a structured clinical ladder MP to enhance professional development in early to mid-career nurses. The skills of the PM utilizing new evidence, fostering partnerships with nurse leaders, and incorporating strategies have contributed to the project's success. Any organization can replicate this EBP project with the guidance of a nurse leader using tactics to improve nurses professional development, increase clinical ladder participation rates, and contribute to cost savings in health care. Finally, the success of the clinical ladder MP impacts the patients. Providing clinical ladder mentoring opportunities to support nurses fosters growth and retention at the bedside; thus, ensuring the best quality of care is provided to the patients and families.

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Appendix A

Mentorship Effectiveness Scale

MENTORSHIP EFFECTIVENESS SCALE

Your name: _____

Directions: The purpose of this scale is to evaluate the mentoring characteristics of _____ _____, who has identified you as an individual with whom he/she has had a professional, mentor/mentee relationship. Indicate the extent to which you agree or disagree with each statement listed below. Circle the letters that correspond to your response. Your responses will be kept confidential.

SD = Strongly Disagree
D = Disagree
SLD = Slightly Disagree
SLA = Slightly Agree
A = Agree
SA = Strongly Agree
NA = Not Applicable

SAMPLE: My mentor was hilarious.	SD	D	SLD	SLA	A	SA	(NA)
1. My mentor was accessible.	SD	D	SLD	SLA	A	SA	NA
2. My mentor demonstrated professional integrity.	SD	D	SLD	SLA	A	SA	NA
3. My mentor demonstrated content expertise in my area of need.	SD	D	SLD	SLA	A	SA	NA
4. My mentor was approachable.	SD	D	SLD	SLA	A	SA	NA
5. My mentor was supportive and encouraging.	SD	D	SLD	SLA	A	SA	NA
6. My mentor provided constructive and useful critiques of my work.	SD	D	SLD	SLA	A	SA	NA
7. My mentor motivated me to improve my work product.	SD	D	SLD	SLA	A	SA	NA
8. My mentor was helpful in providing direction and guidance on professional issues. (e.g., networking).	SD	D	SLD	SLA	A	SA	NA
9. My mentor answered my questions satisfactorily (e.g., timely response, clear, comprehensive).	SD	D	SLD	SLA	A	SA	NA
10. My mentor acknowledged my contributions appropriately (e.g., committee contributions, awards).	SD	D	SLD	SLA	A	SA	NA
11. My mentor suggested appropriate resources (e.g., experts, electronic contacts, source materials).	SD	D	SLD	SLA	A	SA	NA
12. My mentor challenged me to extend my abilities (e.g., risk taking, try a new professional activity, draft a section of an article).	SD	D	SLD	SLA	A	SA	NA

Please make additional comments on the back of this sheet.

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Appendix B

Permission to Use Mentorship Effectiveness Scale

Ronald Berk <rberk1@jhu.edu>

Tue 07/10, 08:24 PM

Merritt, Kristin

Dear Future Dr. Merritt:

Thank you for your inquiry. I agree to all of the terms of your email of July 10 to use my mentorship scales. I hereby grant you permission to use those scales intact or modified for your target population in your research as long as the copyright line, which has been updated, remains affixed at the bottom and the AM article is referenced. Indicate that you adapted the scale for your research.

The *AM* article gives the background on development of the scales. The items were based on the literature and the scale was build on standard psychometric guidelines. The summated ratings scale uses total score for interpretation. However, the unique nature of each relationship precludes aggregating the scores across mentees for group analysis, especially estimating reliability.

The most recent reformatted version can also be found on www.ronberk.com (Publications, click Articles, scroll down to article, click PDF, enjoy!) and also in my book *Thirteen Strategies to Measure College Teaching*. There is also another article on the matching of mentor to mentee you might find of interest based on speed dating.

I hope you find these materials useful in your research. I wish you success in your dissertation on mentorship. Thank you for your interest in our work. If I can be of further help, please don't hesitate to ask.

Have a fantastic 2018!

Sincerely,
Ron

Ronald A Berk, PhD
Professor Emeritus, Biostatistics & Measurement,
Former Assistant Dean for Teaching,
The Johns Hopkins University
Email: **rberk1@jhu.edu** **Phone: 410-940-7118**
Speaking Brochure: **http://www.ronberk.com/docs/brochure_education.pdf**
Websites: **www.ronberk.com** **www.pptdoctor.net**
LinkedIn: **http://www.linkedin.com/in/ronberk/**
Facebook: **http://www.facebook.com/pptdoctor** **www.facebook.com/raberk**
Blog: **http://ronberk.blogspot.com**
Twitter: **http://twitter.com/#!/pptdoctor**

Appendix C

Evidence Table Matrix

Article (APA Citation)	Level of Evidence (I to VII)	Data/Evidence Findings	Conclusion	Use of Evidence in EBP Project Plan
Adeniran, R. K., Smith-Glasgow, M. E., Bhattacharya, A., & XU, Y. (2013). Career advancement and professional development in nursing. Nursing Outlook, 61(6), 437-446. doi:10.1016/j.outlook.2013.05.009	Level IV	Cross-sectional design; studied UENs and IENs participation in mentoring, professional development and career advancement. Acceptable sample size for study; 97% of UENs and 29% IENs promoted through CL	UENs have higher self-efficacy, promote professional development and career advancement through mentorship than IENs.	Mentoring promotes self-efficacy, professional development, and career advancement. Measure CLP participation rates after implementing mentoring program.
Berk, R. A., Berg, J., Mortimer, R., Walton-Moss, B., & Yeo, T. P. (2005). Measuring the effectiveness of faculty mentoring relationships. Academic Medicine, 80, 66-71.	Level VII	Can score MES tool either item-by-item or by a total sum of all questions using the 6-point Likert summated scale. MES rating scale is 0-60.	Psychometric issues including content-related validity and response bias is possible because each mentor and mentee relationship differs.	Utilize MES tool for EBP project, but state in paper there are psychometric issues with the tool. Also, use total sum of all questions versus item-by-item.
Chen, C., & Lou, M. (2014). The effectiveness and application of mentorship programmes for recently registered nurses: A systematic review. Journal of Nursing Management, 22(4), 433-442. doi:10.1111/jonm.12102	Level V	Five studies, years of experience and personal and professional characteristics should be considered when choosing mentors, one-to-one mentorship is most effective	Mentorship programs are effective in nurse retention, increase job satisfaction, and professional development.	Include one-to-one mentoring as part of the clinical ladder mentorship program practice change.

Cottingham, S., DiBartolo, M. C., Battistoni, S., & Brown, T. (2011). Partners in nursing: A mentoring initiative to enhance nurse retention. Nursing Education Perspectives, 32(4), 250-255.	Level VII	Implemented one-to-one mentorship program. 100% of mentees were satisfied with their jobs, intended to stay at hospital, and in their profession. Hospital saved 328,800 in turnover costs.	Mentorship programs are effective in nurse retention, increase job satisfaction, and professional development.	Include one-to-one mentoring as part of the clinical ladder mentorship program practice change.
Dehon, E., Cruse, M. H., Dawson, B., & Jackson-Williams, L. (2015). Mentoring during medical school and match outcome among emergency medicine residents. The Western Journal of Emergency Medicine, 16(6), 927-930. doi:10.5811/westjem.2015.9.27010	Level VI	199 participants completed the study. Residents with mentors and matched to their first or second residency choice, had higher MES scores with a mean of 51.13 compared to those students that matched with their third choice or higher with a mean of 43.59.	Students with an effective mentor are more likely to receive their first match in residency programs.	Mentoring promotes professional development and career advancement. Utilize MES tool to evaluate mentor effectiveness in the CLP.
Fleming, K. (2017). Peer mentoring: A grass roots approach to high-quality care. Nursing Management, 48(1), 12-14. doi:10.1097/01.NUMA.0000511191.71783.a3	Level VII	Health system peer mentor program lead by expert clinical ladder nurses; Utilized PDCA model; Measured peer mentor engagement; program growth; and collaboration; 1-year post implementation engagement increased to 66% and program growth to 125% across all 5-campuses.	Increased program growth and nurse engagement	Include nurse engagement in outcome measures by assessing activities clinical ladder participates in; expand program to include all service lines and campuses.
Jakubik, L. D., Eliades, A. B., Gavriloff, C. L., & Weese, M. M. (2011). Nurse mentoring study demonstrates a magnetic work environment: Predictors of mentoring benefits among pediatric nurses. Journal of Pediatric Nursing, 26(2), 156-164. doi:10.1016/j.pedn.2010.12.006	Level IV	Descriptive cross-sectional study; studied 138 pediatric nurses; 58% nurses intend to stay; 51% of nurses mentored during employment; 1:1 mentoring.	MP increased staff retention	Include one-to-one mentoring as part of the clinical ladder mentorship program practice change.

McBride, A. B., Campbell, J., Woods, N. F., & Manson, S. M. (2017). Building a mentoring network. Nursing Outlook, 65(3), 305-314. doi:10.1016/j.outlook.2016.12.001	Level VI	Formal mentor program; mentee paired with three different type of mentors; study evaluated a 5-year period; Utilized MES tool to evaluate mentor effectiveness; primary mentor average score was highest, accessibility was found to be an issue with all 3-mentor relationships.	MP improved support and advocacy; faculty professional development	Mentoring promotes self-efficacy, professional development, and career advancement. Utilize MES tool to evaluate mentor effectiveness in the CLP.
Mills, J. F., & Mullins, A. C. (2008). The California nurse mentor project: Every nurse deserves a mentor. Nursing Economic, 26(5), 310.	Level VI	Formal mentor program; measured over 3-years; structured education for mentor and mentee; Surveyed nurses in 4-hospitals; turnover decreased to 8%; MP savings over 3-years was $1.4 to $5.8 million.	MP improved turnover; job satisfaction; professional confidence.	Design and implement curriculum to train CLA and nurses pursuing clinical ladder; assign mentor and mentee based on criteria in MP. Monitor turnover as a long-term goal for project and assess cost
Vaupel-Juart, S. & Herron, L. (2014). Walking the walk: Mentoring professionals development of staff nurses, 34(2), p E28-E29.	Level VII	Implemented a Clinical Advancement Committee mentorship to address participation in the clinical ladder was shown to increase participation by 16.5%, certification by 8.26%, and RN to BSN by 4.96%.	Mentors increase CL participation, certifications, and BSN enrollment.	Include implementing mentors as part of the clinical ladder program practice change. Measure participation, certifications, and BSN enrollment in project
Warman, G., Williams, F., Herrero, A., Fazeli, P., & White-Williams, C. (2016). The design an redesign of a clinical ladder program: Thinking big and overcoming challenges. Journal for Nurses in Professional Development, 32(6), E1-E7. doi:10.1097/NND.0000000000000307	Level VI	Implemented CL peer mentors to assist staff in process Participation rate rose 23% post-implementation, but decreased due to changes in CL criteria	Increase CL participation, professional development, staff satisfaction, retention, overall satisfaction.	Include implementing mentors as part of the CLP practice change. Measure professional development through nurse engagement in activities i.e. committee involvement

Note. The evidence matrix is a table that illustrates the significant sources used in the literature review. The information in the table provides the level of evidence, the summary of the article, and the information that was used for this paper from each source.

Appendix D

SWOT Analysis

S **Strengths** - Support and guidance from the project team - Expert and highly qualified CLRB team members - Clinical ladder aligns with Magnet Recognition Program® - CLRB meets four-times per year - No financing of the project or new resources required - Project site experience rapid growth inpatient services	**W** **Weaknesses** - RN turnover at one to three years - Eligible nurse mentees lack mentorship - Number of CLAs - Length of time to complete clinical ladder portfolio
O **Opportunities** - Ability to promote professional development with nursing - Improve retention rates among expert CNs at the bedside - MPs improve job satisfaction, work environment, and patient outcomes - Potential to expand clinical ladder MP to non-nursing departments offering CLPs - Decrease the cost of turnover/ recruitment	**T** **Threats** - CLAs not fulfilling expected role and responsibilities - CLRB ability to sustain the project - Expand CLA mentor role to other campuses in the health system - CLA mentor drift in expectations - Rapid growth in patient services may prevent CLAs from mentoring nurse mentees

Appendix E

Organizational Letter of Approval

July 11, 2018

To Whom It May Concern:

We at [redacted] have reviewed Kristin Merritt's DNP Project titled "Clinical Ladder Mentoring: The Impact on Nursing Professional Development." Mrs. Merritt has organizational support and approval to conduct her project within our institution. We understand that for Mrs. Merritt to achieve completion of the DNP program, dissemination of the project will be required by the University, which will include a public presentation related to the project and a manuscript submission will be encouraged.

Our organization has deemed this project as quality improvement initiative and requiring institutional IRB review.

Thank you,

Appendix F

Project Site Institutional Review Board (IRB) Approval Letter

[redacted]

[redacted] INSTITUTIONAL REVIEW BOARD DECLARATION OF ACTIVITY NOT MEETING THE DEFINITION OF RESEARCH

The [redacted] IRB has determined that the following activity does not meet the definition of research as described in 45 CFR 46.102(d), 21 CFR 50.3(c) and 21 CFR 56.10(c) and satisfies the Privacy Rule as described in 45 CFR 164.514.

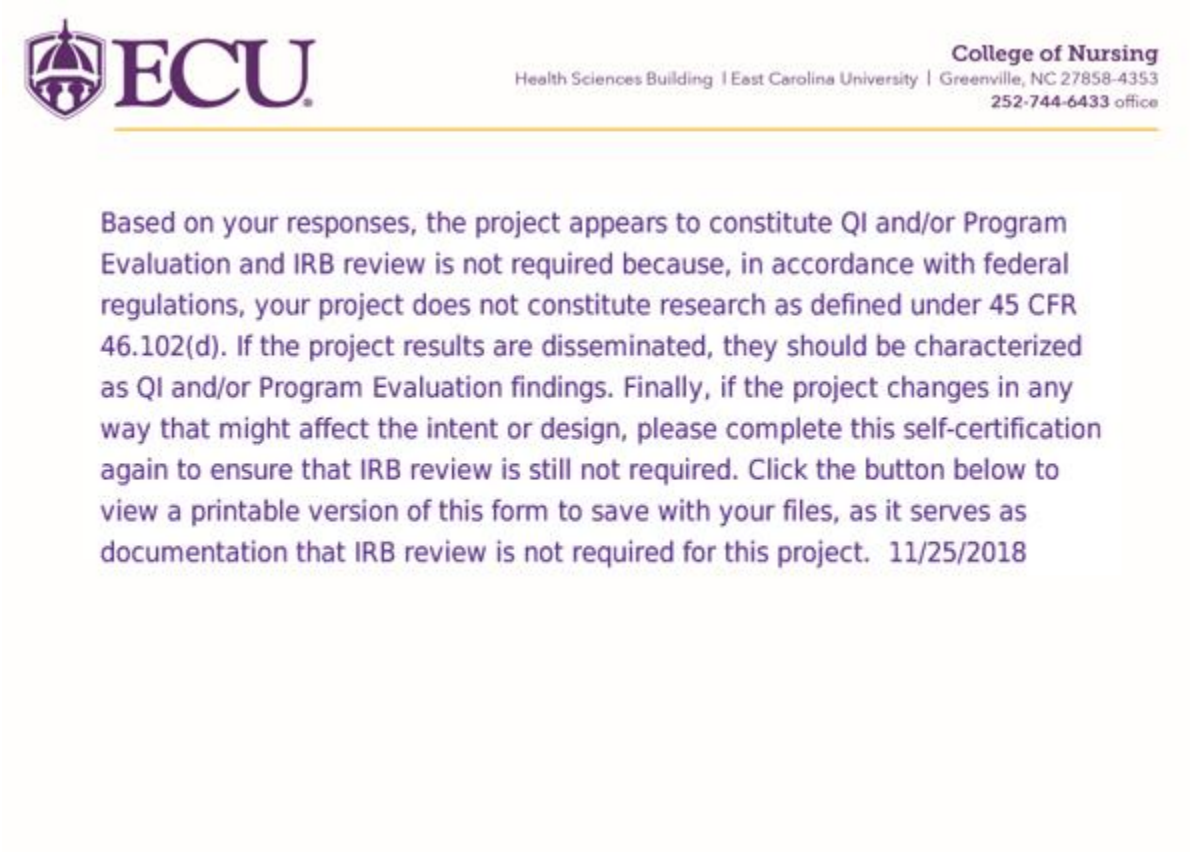
Protocol ID: Pro00101365
Reference ID: 291551
Protocol Title: Clinical Ladder Mentoring: The Impact on Nursing Professional Development
Principal Investigator: Deborah Allen

This IRB declaration is in effect from November 20, 2018 and does not expire. However, please be advised that any change to the proposed research will require re-review by the IRB.

[redacted] Institutional Review Board
2424 Erwin Rd | Suite 405 | Durham, NC | 919.668.5111
Federalwide Assurance No: FWA 00009025

Appendix G

East Carolina University Institutional Review Board (IRB) Approval Letter



ECU

College of Nursing
Health Sciences Building | East Carolina University | Greenville, NC 27858-4353
252-744-6433 office

Based on your responses, the project appears to constitute QI and/or Program Evaluation and IRB review is not required because, in accordance with federal regulations, your project does not constitute research as defined under 45 CFR 46.102(d). If the project results are disseminated, they should be characterized as QI and/or Program Evaluation findings. Finally, if the project changes in any way that might affect the intent or design, please complete this self-certification again to ensure that IRB review is still not required. Click the button below to view a printable version of this form to save with your files, as it serves as documentation that IRB review is not required for this project. 11/25/2018

Appendix H

Nurse Mentee Demographics Survey

College of Nursing
Health Sciences Building | East Carolina University | Greenville, NC 27858-4353
252-744-6433 office

Nurse Mentee Demographics Survey

Directions: Fill in the blank or bubble that represents the most accurate description of your professional profile.

1. What is your current age as of 2018?
   _____ years

2. What is your gender?
   - Male
   - Female

3. What is your current Clinical Nurse level?
   - Clinical Nurse II
   - Clinical Nurse III

4. How many years have you worked as a registered nurse as of 2018?
   _____ years

5. How many years have you worked at project site?
   _____ years

Appendix I

Project Site Clinical Ladder Participation Data Record

Project Site Clinical Ladder Participation Data Record						
Fiscal Year (FY) and Quarter (Q)	Date of CLRB	Total Number of Portfolios Submitted	Total Number of CNIII Portfolios Submitted	Percent of CNIII Portfolios Submitted	Total Number of CNIV Portfolios Submitted	Percent of CNIV Portfolios Submitted
FY18 Q3	Feb-18					
FY18 Q4	May-18					
FY19 Q3	Feb-19					
FY19 Q4	May-19					