Nursing Residency Programs in the Hemodialysis Setting

by

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Abstract

The United States has been presented with an upcoming nursing shortage which affects the in-center hemodialysis (ICHD) setting. To provide quality care to patients, dialysis organizations must innovate to retain nurses to this field. Nurse residency programs (NRPs) for newly graduated nurses have proven to improve nurse retention. The purpose of this project was to answer the question: Do new graduate nurses in the ICHD setting who complete one year NRPs experience longer retention in their roles at three, six, 12, and 24 months of employment than new graduate nurses who do not participate in NRPs? In addition to measuring retention, two additional objectives were measured including participants will score the effectiveness of each monthly training as greater than a three average on a Likert scale of one to five following each month's training and 90 percent of the participants will the answer yes to the question "I intend to remain employed in this organization for at least 12 months" following each month's training. A NRP pilot program including nurses with less than 18 months of nursing experience was implemented based on evidence-based practice and input from stakeholders. After three months of implementation, both of the secondary objectives were being met which indicate the answer to the clinical question may likely be improved RN retention is experienced. As such, the pilot will continue through completion and will be expanded beyond pilot following the achievement of desired results.

Keywords: nurse retention, nurse residency programs, hemodialysis nursing

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Nursing Residency Programs in the Hemodialysis Setting

Chapter I: Introduction

Background and Significance

A perfect storm of a high percentage of upcoming nurse retirements, an increase in the volume of Americans who will need healthcare, and poor retention of nurses by organizations has presented the United States (U.S.) with a nursing shortage (Cochran, 2017; Fleming & Haney, 2013; Hunt et al., 2012). The dialysis setting will not be immune to this nursing shortage (Wolfe, 2014). As such, dialysis organizations must innovate to retain, engage, and attract nurses to this field.

Dialysis nursing is a specialty (Gomez, Castner & Hain, 2017). Historically, organizations have been hesitant to hire newly graduated nurses into this specialty with the belief that nurses required work experience before they were suitable to work in the nephrology setting (Doss-McQuitty, 2017). However, in today's environment with an impending nursing shortage, newly graduated nurses must be a solution to staffing in the nephrology and dialysis setting (Doss-McQuitty, 2017). Instead of avoiding the hiring of new graduate nurses into the dialysis setting, organizations should invest in the training and preparation of this valuable workforce (Doss-McQuitty, 2017).

Organizational nurse retention is critical to help solve the nursing shortage (Phillips & Hall, 2014). Many nurse retention strategies have failed to prove effective (Hunt et al., 2012). Organizations such as the American Association of Colleges of Nursing (AACN), have identified that nurse residency programs (NRPs) for newly graduated nurses, however, have proven to improve nurse retention as well as develop high quality nurses (AACN, 2017; Rhodes et al., 2013). Currently, research is limited to NRPs in the acute care setting, however, a review

of literature suggests they may yield the same positive results in the outpatient hemodialysis setting.

The Centers for Medicare and Medicaid Services (CMS) requires that nurses must have "at least one year of registered nursing experience" before they can staff in dialysis facilities without another nurse present (Peters, 2013, p. 21). Once a nurse has obtained this one year of nursing experience, the nurse can work in a dialysis facility without the need for a more experienced nurse to be present. During this one year period, newly graduated nurses can practice all aspects nursing once they have completed their training programs.

The current training program for the large dialysis organization (LDO) for which the NRP will be piloted is 12 weeks in length and led by nurse instructors who teach new dialysis nurses using a detailed multi-media format. Clinical experience for hands-on practice and application of classroom learning is provided by onsite preceptors in the dialysis facilities, clinical educators, and interprofessional teams. During training, nurses must complete skills checklists which guide and acknowledge the completion of necessary skills and knowledge. Nurses must complete and pass competency testing to be considered complete with training. Newly graduated nurses complete the same training program as nurses with more nursing experience.

Impetus to the project. Over the course of the past year, the LDO for which this project will be implemented has experienced rolling 12-month retention rates for newly hired nurses around 74 to 75 percent. Stakeholders in the organization determined that these retention rates were unacceptable. As such, a rolling 12-month retention rate goal of 82 percent was established. Improving nurse retention rates is a well-known, high priority within this LDO.

Several strategies to improve nurse retention have been implemented in the organization. To date, however, specific strategies to focus on retention of newly graduated nurses have not been employed. A strategy to retain this specific population of nurses should be implemented as focus and energy have been placed on recruiting nurses from this pool. Improving retention for newly graduated nurses may contribute to improving overall nurse retention for the LDO. Additionally, implementation of an effective NRP may differentiate the LDO as an employer of nurses and may result in filling vacant positions with newly graduated nurses.

Relevance of the topic. Adequate nurse staffing is critical to the delivery of quality care in nephrology (Wolfe, 2014). Patients on dialysis depend on providers to hire and retain dialysis nurses to provide this quality care. The topic of NRPs is relevant as a demonstrated solution to improve nurse retention (AACN, 2017). NRPs can be applied to the in-center hemodialysis (ICHD) setting to improve nurse retention in this nursing specialty.

Prevalence and scope of project. There are 468,000 individuals in the U.S. who have end-stage renal disease (ESRD) and receive life sustaining dialysis treatments across over 6,000 dialysis facilities (National Kidney Foundation, 2016). The population of Americans with ESRD is projected to significantly increase to over 774,000 by 2020 (Collins, 2011). These patients require the care of trained and competent nurses.

The LDO in which the project will be implemented in is an international provider of dialysis services (DaVita, 2017). Within the U.S., the organization serves approximately 196,000 patients across over 2,400 outpatient dialysis facilities (DaVita, 2017). The organization employs nearly 18,000 nurses (DaVita Stories, 2017). The NRP pilot will specifically occur in the Northern Illinois geography.

The scope of this project is to design and pilot an effective one year long NRP for the LDO. This program will include newly graduated registered nurses (RNs) who have completed and passed their state nursing board examinations within 18 months or less or who have graduated accredited schools of nursing and are scheduled to complete their state nursing board examinations within three months of the dates of their graduations. Effectiveness will be measured by comparing turnover percent for newly graduated nurses in the NRP compared to newly graduated nurses who have not completed the NRP.

Importance of work. The nearly half a million individuals who require dialysis to sustain life are dependent on competent dialysis nurses to provide their care (National Kidney Foundation, 2016). Dialysis providers have an obligation to solve for how the impending nursing shortage will impact the patients who they serve. Nurse residency programs teach new graduate RNs skills that result in increased patient safety and patient satisfaction (Rhodes et al., 2013).

Nurse residency programs have proven to improve job satisfaction that results in improved retention of newly graduated nurses (Rhodes et al., 2013). Outside of the actual participants in NRPs, other nurses within organizations have also experienced increased satisfaction with new nurses who have completed NRPs (Blevins, 2016). As such, NRPs may not only improve the satisfaction and retention of the actual participants, other nurses in the organization may experience the same improvements.

Problem Statement

Nurse retention rates at this LDO are not meeting the organizational stakeholders' goal of 82 percent. Current retention rates are eight percent below the goal. Failure to meet the goal of 82 percent results in nurses working more shifts than they prefer which can negatively impact

job satisfaction and cause further declines in retention. Additionally, failure to retain nurses negatively impacts the organization financially as training nurses is costly. Patients, other employees and physicians lose the comfort of consistent caregivers and colleagues when nursing retention is lower than 82 percent.

Project Aim

The aim of this project is to implement a pilot NRP for newly graduated RNs working in ICHD for a LDO which will result in reduced turnover of these nurses when compared to newly graduated RNs who have not completed a NRP. The nurse retention goal for the organization is 82 percent. Currently, the LDO is experiencing nurse retention between 74 and 75 percent. Three specific objectives will be expected and measured. First, NRP participants will demonstrate a decrease in turnover of at least 10 percent at three, six, 12, and 24 months of employment each when compared to newly graduated nurses who have not completed the NRP. Second, NRP participants will score the effectiveness of each monthly training as greater than a three average on a Likert scale of one to five following each month's training. An average score of greater than three will represent that the program viewed as above average in effectiveness by the participants. Third, 90 percent of the participants will the answer yes to the question "I intend to remain employed in this organization for at least 12 months" following each month's training. Having 90 percent of the participants indicate they intend to remain employed for at least 12 months will demonstrate an expected retention rate which is greater than the current rate of 74 to 75 percent and exceeds the organization's overall retention goal of 82 percent.

Clinical Question

The purpose of this project is to answer the question: Do new graduate nurses in the ICHD setting who complete one year NRPs experience longer retention in their roles at three,

six, 12, and 24 months of employment than new graduate nurses who do not participate in NRPs?

Congruence with Organizational Strategic Plan

The LDO for which the NRP will be designed has a robust culture that is supportive and empowering for nurses. The organization's mission is clearly articulated "to be the provider, employer and partner of choice" (DaVita, 2017). Nursing is the lynchpin of each of these three elements as nurses provide care to patients, lead other healthcare professionals on the dialysis treatment floor, and collaborate with physician partners to assess and plan care for patients (Gomez et al., 2017).

The organization's seven core values include: service excellence, integrity, team, continuous improvement, accountability, fulfillment, and fun (DaVita, 2017). These core values align well with the attributes of nursing and the nephrology nursing scope and standards of practice (Gomez et al., 2017). Nephrology has been recognized as a nursing specialty by the American Nurses Association (ANA) thus warranting specific delivery of specialized and excellent nursing care (Gomez et al., 2017). Nurses are recognized as a most trusted profession by the public which is representative of nursing's commitment to integrity (Gomez et al., 2017). The nursing profession fosters team through interprofessional collaboration to continuously improve patient care (Gomez et al., 2017). Nephrology nurses have "authority, accountability, and responsibility for nursing practice" in the dialysis setting (Gomez et al., 2017, p. 21). Additionally, nurses seek fulfillment and fun in their work through "engaged learning" and application of knowledge (Yoder, 2017).

Exemplary nursing is critical for the organization to achieve its mission and demonstrate its core values. As such, implementation of a NRP to improve retention for newly graduated

nurses who have joined the organization is in alignment with the organization's strategic plan. The NRP will develop nursing talent who remain employed with the organization and find satisfaction in their jobs as they contribute to the organization through the provision of excellent patient care (Cline, La Frentz, Fellman, Summers & Brassil, 2017).

Literature Review

Registered nurses (RNs) are critical to healthcare delivery. Nurses practice in all healthcare settings, performing essential patient assessments, promoting health through education, and delivering life-saving interventions (ANA, 2017). They are the lynchpins of patient care as they coordinate, direct, and supervise patient care for the entire healthcare team (ANA, 2017).

RNs are also the largest single group of professionals in healthcare (Mills, Woods, Harrison, Chamberlain-Salaun & Spencer, 2017). In 2014, there were 2,751,000 nursing jobs in the U.S. (Bureau of Labor Statistics, 2015). By 2024, this number will increase dramatically by nearly half a million more (Bureau of Labor Statistics, 2015).

More nurses are needed to care for our aging population (Fleming & Haney, 2013). In 1965, the average lifespan was 70.2 years and is expected to reach 80 years in 2025 (Fleming & Haney, 2013). Also contributing to the growing demand for nurses is the increase of individuals who have health insurance and associated increased access to care (Clarke, Norris & Schiller, 2017). In 2006, 43.6 percent of Americans were uninsured; this number had improved to 28.6 percent as of 2016 (Clarke et al., 2017).

The increase in the number of individuals who will seek health care creates a clinical practice issue. This is because, simultaneous to the increase in those who need care, there is a mass exodus of nurses from the workforce. Fifty-five percent of all currently practicing nurses

will retire by 2020 (Cochran, 2017). And, they are not being replaced by new nurses at the same rate. This imbalance will result in a RN vacancy rate as high as 20 percent (Cochran, 2017).

The need for RNs will increase by 16 percent from 2012 to 2024 (Bureau of Labor Statistics, 2015). Nursing schools, however, had only experienced a 3.6 percent enrollment increase as of 2016 (AACN, 2017). Additionally, organizations should not assume that the hiring of new nursing graduates in itself will solve their nursing shortage woes; they must also put energy into retaining them. Research has shown that 17.5 percent of newly graduated RNs leave their jobs in the first year and 33.5 percent of them have departed before reaching their second year (Kovner, Brewer, Fatehi & Jun, 2014). Coupled with the average rate of all nursing turnover, which is 13 percent, this impending nursing shortage will be out of hand if solutions are not implemented (Cochran, 2017).

Search Process

To complete a review of available research and information, a search for peer-reviewed journal articles was completed electronically using the Cumulative Index of Nursing and Allied Health Literature (CINAHL). The keywords *nurse residency program* and *nursing shortage* were used for the search. Only results between the dates of January 2012 to September 2017 were considered. The search yielded 315 results that were available via the Bradley University online library. Fifteen articles were selected for inclusion as these articles provided the most detailed evidence of the effectiveness and infrastructure of NRPs.

Synthesis of Evidence

RN turnover and vacancies are associated with negative outcomes. Patient outcomes, specifically including safety issues and infection control, are jeopardized when nursing turnover is high (Dawson, Stasa, Roche, Homer & Duffield, 2014). Increases in nursing turnover are

correlated with increases in medical errors (Dawson et al., 2014). The staff members who remain employed with organizations that experience high turnover will also suffer, as they experience reduced morale and increased stress (Dawson et al., 2014). Additionally, nursing turnover places financial burden on an already strained healthcare system as the process to hire and train replacement nurses costs up to $88,000 (Li & Jones, 2013).

Many RN retention strategies, such as benefits packages, have not proven to be effective in improving RN retention (Hunt et al., 2012). While retirement is inevitable, solutions to retain nurses are critical to meet the needs of an aging and growing population. Retention of new graduate nurses, in particular, is a solution to the nursing workforce shortage and is imperative to healthcare organizations' sustainability (Phillips & Hall, 2014).

New graduate nurses, however, are not always prepared for independent practice immediately following nursing school. They have expressed that they feel underprepared to make the leap from school to practice (Pittman, Herrera, Bass & Thompson, 2013). They are not prepared for the "fast-paced, high acuity" environment of today's healthcare world (Blevins, 2016, p. 367).

Healthcare settings are diversified and specialized (Cline et al., 2017). New graduate nurses may experience "reality shock" upon their entries into independent practice (Cochran, 2017, p. 55). They may feel overwhelmed as they newly enter a profession where patients' lives are on the line (Phillips & Hall, 2014).

New nurses are also overwhelmed with information and high workloads, and their preceptors recognize they lack skills such as prioritization (Rhodes et al., 2013). As a result, they feel undervalued and lack confidence in their abilities (Cochran, 2017). Not only do they

consider leaving their first nursing jobs, in their first three years of working, almost 20 percent of nurses intend to leave the profession altogether (Mills et al., 2017).

New nurses have clearly established wants and needs. They desire additional support as they transition from learning to practice (Phillips & Hall, 2014). New nurses also seek healthy and supportive professional environments (Mills et al., 2017). Additionally, they benefit from good preceptors who provide opportunities for clinical experience for them (Cochran, 2017). Good preceptors are those who care for the new graduates' development and instill "faith and hope" in them (Phillips & Hall, 2014, p. 191).

In general, nurses will remain in positions where they experience rewards and recognition for their work (Dawson et al., 2013). Once they gain experience, they seek autonomy and opportunities for mobility (Dawson et al., 2013; Yamaguchi, Inoue, Harada & Oike, 2016). However, they must first be nurtured through the transition from students to independently practicing clinicians (Phillips & Hall, 2014). NRPs are a solution to effectively support this transition.

Nurse residency programs. NRPs include evidence-based curriculum to provide extended education and knowledge for new graduate RNs in areas such as clinical orientation, leadership, patient safety, and professional practice (Cline et al., 2017). They teach inexperienced nurses important skills such as communication and critical thinking (Blevins, 2016). In addition to these technical and professional practice skills, NRP curriculums include important self-care content such as the practice of resiliency to reduce stress and burn out (Mills et al., 2017).

The overarching goal of NRPs is to assist novice nurses in their transitions from learning to competent nursing (Rosenfeld & Glassman, 2016). Assistance during this time of transition is

imperative for the success of new nurses, and organizations that guide care in the U.S. have taken notice. For instance, the Institute of Medicine specifically recommended organizations employ NRPs to transition nurses to independent practice (Cline et al., 2017). NRPs are also endorsed by the Carnegie Foundation study of nursing education and The National Council of State Boards of Nursing has stated an initiative to "build the evidence" of programs to transition nurses from school to independent practice (Pittman et al., 2013, p. 598).

The programs are usually three months to one year in length (Pittman et al., 2013). Nurses are paid for their time spent in the programs (Pittman et al., 2013). Upon completion, nurses may expect to commit to up to two years of service to their organizations in return for the initial investment in their success (Pittman et al., 2013).

NRPs support nurses to deliver competent and confident care (Phillips & Hall, 2014). Results from nurses who have completed these programs yield statistically significant increases in critical thinking, confidence and communication (Cochran, 2017). NRP graduates also have greater self-confidence, prioritize better, and cope with stress better (Blevins, 2016).

Research has demonstrated that NRPs improve job performance, job satisfaction, and result in nurses who are more likely to stay with their organizations (Rhodes et al., 2013). Studies have revealed turnover rates as low as 5.7 percent with NRPs that effectively teach clinical skills and assist nurses with transition and socialization (Phillips & Hall, 2014). Importantly, NRPs teach new graduate RNs skills that result in increased patient safety and job satisfaction (Rhodes et al., 2013).

Patient safety. NRPs produce safe nurses (Zinn, Guglielmi, Davis & Moses, 2012). NRPs allow participants to rehearse and practice technical and critical thinking skills prior to independent practice (Phillips & Hall, 2014). As a result, new nurses who have completed NRPs

demonstrate “noticeable improvements in clinical decision making” (Blevins, 2016, p. 367). Areas of noticeable improvement include communication, prioritization of care, documentation, utilization of technology, and accountability (Blevins, 2016). These areas of improvement contribute to a reduction of clinical errors as NRP participants have elevated clinical competency (Rhodes et al., 2013).

Better retention. Nurses who have completed NRPs have higher job satisfaction and are more committed to their organizations (Blevins, 2016). The AACN (2017) has experienced 95 percent retention across 72,000 first-year nurses in more than 300 hospitals as a result of NRPs. For one organization, a reduction in turnover of new graduate nurses from 36.8 percent to 6.4 percent was experienced as a result of implementation of a NRP (Cochran, 2017). Others have experienced one-year retention rates greater than 90 percent (Cline et al., 2017).

Effective cultivation of employee identification with and involvement in organizations is connected to reduced turnover (Nei, Snyder & Litwiller, 2015). NRPs provide for nurses to practice in their areas of specialty, however, they are also able to form human connections with their cohorts of other newly graduated RNs who are experiencing the same transitional hurdles (Cline et al., 2017; Nei et al., 2015).

NRP participants have indicated they experienced advantages in transition, leadership support and clinical education because of NRPs (Rosenfeld & Glassman, 2016). Research supports this claim through identification of 11.5 percent better retention of nurses at 12 months for nurses who have completed NRPs versus those who have received more traditional training (Phillips & Hall, 2014). Ultimately, the longer nurses stay employed, the less likely they are to quit their jobs (Nei et al., 2015).

Financial benefits. Retaining nurses is “imperative to healthcare organizations fiscal sustainability” (Phillips & Hall, 2014, p. 190). Thirty-five to 65 percent of new RNs change their jobs in their first year of employment (Pittman et al., 2013). This is a major cost driver for organizations as 10 percent of the RN workforce are RNs who have been in practice for less than one year (Cochran, 2017).

Retaining nurses is a “fiscal and operational priority” for healthcare organizations as replacing one individual nurse can cost from $60,000 to $96,000 (Cline et al., 2017, p. 385). Particularly for newly hired nurses, organizations can expect to lose $50,000 in orientation costs for nurses who are not retained for at least 12 months (Zinn et al., 2012). There is “sufficient evidence” that NRPs improve first year retention of nurses and thus positively contribute to the financial health of healthcare organizations (Rosenfeld & Glassman, 2016, p. 343).

Other benefits. Research has highlighted that nurse preceptors and mentors have higher satisfaction with new nurses who have completed NRPs (Blevins, 2016). They experience NRP graduates as more skillful in communication and assessments and find they take better initiative in providing care (Rhodes et al., 2013). As tenured and novice nurses are on the same team, all of them benefit when tenured nurses have better experiences with new graduate nurses (Rhodes et al., 2013).

Design. NRPs can be designed in many ways. They often include coaching sessions, didactic presentations, peer discussion, and reflection (Cochran, 2017). They may also involve learning through seminars and observational experiences such as job shadowing (Rosenfeld & Glassman, 2016). Some organizations include the expectation of development and presentation of evidence-based projects by the participants in NRPs (Cochran, 2017).

Interactive learning and working through case scenarios have been successful tactics for increasing self-awareness and critical thinking for nurses (Lee, Goh, Yeo, Kaur & Chua, 2015). Other recommended approaches include lab simulation, journaling, and role-playing (Phillips & Hall, 2014). NRPs also can teach soft skills including kindness, active listening, and respect (Phillips & Hall, 2014).

Advancement. NRPs do not only solve for immediate nursing needs, they create pipelines for the next generation of nursing leaders. In addition to all aforementioned benefits, NRP participants experience higher percentages of professional certifications, advanced education, and professional accomplishments than the general nursing population (Rosenfeld & Glassman, 2016). They also have a 23 percent higher likelihood of becoming managers in the organizations where they complete their residency programs (Rosenfeld & Glassman, 2016).

Application of findings. NRPs have been extensively studied in the acute care setting. They have demonstrated benefits for stakeholders including patients, nurses, and healthcare organizations. There is limited information, however, regarding utilization of NRPs in outpatient care settings. The processes utilized in the acute setting, which have yielded these positive benefits, will be tailored and applied to the ICHD setting to determine if the same results can be achieved outside of the acute care setting.

Theoretical Framework

Nursing school graduation is just the start of a lifelong professional journey of development and growth for the registered nurse. The transition from nursing student to independent nurse is challenging, however, an effective foundation can be built during this time to prepare novice nurses to continually advance their professional practice (Bennett, Grimsley, Grimsley & Rodd, 2017). Effective nurse development programs, based on nursing frameworks,

support nurses in building this foundation and help them advance to role mastery (Thomas & Kellgren, 2017).

The idea of nursing development is not new. Over 30 years ago, Dr. Patricia Benner identified the importance of ongoing nurse development due to the complexities of the profession (Davis & Maisano, 2017). Benner then applied her own experience to the Dreyfus Model of Skill Acquisition and developed the Novice to Expert Model (Bowen & Prentice, 2016).

The Novice to Expert Model is a situational framework which provides objectivity into understanding five performance levels of nurses and provides distinct recommendations for chronological advancement through these stages (Thomas & Kellgren, 2017). This framework has demonstrated successful results when used as the foundation and design of nursing programs (Davis & Maisano, 2016). The framework is relevant to NRPs as new graduate nurses enter into organizations as novice nurses. These new nurses depend on the knowledge and experience of more advanced nurses to guide them on their journeys from novices to experts (Bennett et al., 2017).

Framework for project. Benner's Novice to Expert Model framework includes five stages of nursing competencies. These stages, in order of progression, include: novice, advanced beginner, competent, proficient, and expert (Thomas & Kellgren, 2017). First of all, the novice nurse is without any experience in her environment of work (Thomas & Kellgren, 2017). Novice nurses depend on feedback from colleagues and learn best by following rules that align with their theoretical knowledge (Quick, 2016).

Once nurses progress from the novice stage, they become advanced beginners. Advanced beginners have gained work experience to add to theoretical knowledge to include in their

decision making (Thomas & Kellgren, 2017). These nurses effectively utilize tools, such as checklists, to guide their actions (Thomas & Kellgren, 2017). Transformation from the novice to advanced beginner stage is a huge transition for nurses as they become comfortable in their work environments (Quick, 2017).

The third stage in Benner's framework is the competent nurse (Thomas & Kellgren, 2017). Competent nurses prioritize and think analytically beyond the direction on checklists (Thomas & Kellgren, 2017). They recognize their "performance shortcomings" and feel responsible to fill these gaps (Thomas & Kellgren, 2017, p. 229). In addition to practical skills, competent nurses have also developed non-technical abilities such as communication skills (Quick, 2017).

Nurses who advance to the fourth stage, which is the proficient nurse, have the ability to view situations holistically (Quick, 2017). Instinct guides them in making decisions (Thomas & Kellgren, 2017). Proficient nurses fluidly adjust the care they provide based on real time and predicted patient needs (Thomas & Kellgren, 2017).

The fifth and final stage of Benner's Novice to Expert Model is the expert stage. Once an expert, the professional nurse naturally knows what to do (Thomas & Kellgren, 2017). Expert nurses understand care beyond themselves; they know how and when to include others (Thomas & Kellgren, 2017). These nurses are critical to knowledge sharing and mentoring of other nurses (Thomas & Kellgren, 2017).

Framework as project guide. The provision of nephrology care is continually increasing in complexity (Mharapara, 2017). Excellent initial and ongoing education for nephrology nurses is imperative to provide optimal patient care (Mharapara, 2017). Benner's novice to expert framework is applicable to NRPs in dialysis as the framework provides

objective direction for categorizing nurses' competency levels and clear direction as to how to achieve higher levels of competency (Quick, 2016).

New graduates, or novice nurses, have theoretical understanding of how to provide care (Thomas & Kellgren, 2017). They must be provided supportive learning experiences to allow them to apply this knowledge practically (Thomas & Kellgren, 2017). NRPs in the dialysis setting, based on Benner's novice to expert framework, will teach nurse residents how to continually build upon their initial knowledge and gain experiences to advance from novice to advanced beginners (Quick, 2016).

Advanced beginners realize nursing work is more complex than they thought (Thomas & Kellgren, 2017). These nurses recognize relevant data, however, they may not have the ability to utilize this data to prioritize effectively (Thomas & Kellgren, 2017). This population of nurses seek to learn everything they can from preceptors (Thomas & Kellgren, 2017). They may also feel overwhelmed by resources (Thomas & Kellgren, 2017). Collaboration with cohorts helps advanced beginner nurses to advance to the next stage (Thomas & Kellgren, 2017). As such, a NRP in the dialysis setting that includes a cohort of new nurse graduates, led by effective nurse leaders, may best position nurses for success in and beyond advanced beginner status.

Competent nurses have higher levels of responsibility and emotional involvement based on desired outcomes (Thomas & Kellgren, 2017). These nurses strive to model "professional integrity" and expect the same from others (Thomas & Kellgren, 2017, p. 231). Competent nurses think about the future and they enjoy collaboration with their peers (Thomas & Kellgren, 2017). NRPs create an environment for professional sharing for nurses seeking to achieve competent status. Ideally, nurses in cohorts will maintain connectedness during and beyond the NRPs to share professional experiences and knowledge gained.

Proficient nurses deliver care based on patient response versus solely data collection (Thomas & Kellgren, 2017). They have intuition regarding patients' statuses (Thomas & Kellgren, 2017). They also have knowledge and expertise to research and determine answers for questions they encounter in care delivery (Thomas & Kellgren, 2017). In the dialysis setting, NRPs can empower nurses for future achievement of proficient status by providing them with knowledge regarding how to access academic journals and resources. Expectations for a lifetime of pursuit of knowledge of evidence-based practice can be ingrained in new nurses during NRPs.

Finally, expert nurses recognize when they are needed, or not, by others (Thomas & Kellgren, 2017). They empower others to function independently (Thomas & Kellgren, 2017). Expert nurses have visions of "good and caring" for all stakeholders (Thomas & Kellgren, 2017, p. 233). These nurses may be at risk for boredom at some point and should be encouraged to continue to learn and advance their professional practice (Quick, 2017). Expert nurses should share their knowledge with less advanced nurses (Mharapara, 2017). NRPs can provide an outline of the roadmap from novice to expert nursing. These programs can inspire nurses to achieve expert status and provide information regarding future preceptor and mentor opportunities. NRPs in the hemodialysis setting will provide novice nurses with the skills, knowledge and empowerment to advance to expert nurses.

Relevance of framework to clinical question. Benner's Novice to Expert Model framework is a relevant framework for NRPs for graduate nurses as the model guides nurses from the path of novice to advanced beginner, competent, proficient, and finally, expert nurses. The right experiences, combined with education and mentoring from expert nurses, can support movement from novice nurse to more competent phases in short timeframes (Bowen & Prentice, 2016). The clinical question for this project is: Do new graduate nurses in the ICHD setting

who complete one year NRPs experience longer retention in their roles at 12, 24, and 36 months of employment than new graduate nurses who do not participate in NRPs? Benner's framework is relevant to this clinical question based on the assumption that the NRP studied will be designed around the Novice to Expert Model.

Chapter II: Methodology

Needs Assessment

NRPs are worth exploring in the ICHD setting. The combination of a significant departure of nurses from the profession due to retirement and other reasons, simultaneous to a significant increase in the volume of care that will be needed due to an aging population, has positioned the U.S. for a shortage in the nursing workforce that must be addressed (Cochran, 2017; Fleming & Haney, 2013; Hunt et al., 2012). This shortage will impact dialysis organizations as the population of individuals who require dialysis to treat ESRD is expected to grow significantly by 2020 (Collins, 2011; Wolfe, 2014). As such, workforce planning should include encouraging newly graduated nurses to enter the specialized field of dialysis (Doss-McQuitty, 2017).

As research has shown that 17.5 percent of newly graduated RNs leave their jobs in the first year and 33.5 percent of them have departed before reaching their second year, strategies should be implemented to retain these nurses during their early years of practice (Kovner et al., 2014). Implementation of NRPs has demonstrated significant reductions in turnover of newly graduated nurses as low as 6.4 percent for organizations (Cochran, 2017).

Currently, the LDO for which this project will be implemented has launched an initiative to recruit newly graduated RN talent to the organization. As such, a NRP should be piloted to support these nurses in successfully acclimating to their first year of nursing practice which will

foster retention. A successful NRP will contribute to the organization's goal to improve 12-month rolling retention for nursing from 74 to 75 percent to the goal of 82 percent.

The LDO in which the NRP will be piloted has been widely recognized and places emphasis and priority on leadership development programs. NRPs have proven to be complimentary to other leadership development programs (Pittman et al., 2013). As such, implementation of a NRP will enhance the organization's current portfolio of developmental programs.

Project Design

A review of literature was conducted to determine the evidence of effectiveness of NRPs in the healthcare setting. Evidence reviewed indicated that NRPs are an effective way to transition newly graduated RNs from nursing school into clinical practice as evidenced by increased retention and job satisfaction for newly graduated nurses who have completed NRPs. Evidence, however, was limited to acute care institutions. Live and telephonic interviews were conducted with stakeholders in nursing and the outpatient ICHD setting to determine relevancy of NRPs in the dialysis setting. These stakeholders included: nurse preceptors and educators, staff nurses, nurse leaders, newly graduated nurses, nursing students, and non-nursing professionals such as physicians, dietitians and social workers. Input was also obtained by those in administration, recruiting, and unlicensed personnel such as patient care technicians. Relevancy of NRPs in the ICHD setting was confirmed through these interviews and contributions for content and design for the NRP were obtained.

Current training programs for newly graduated RNs were thoroughly reviewed by the researcher. The determination was made to complement current training programs with a NRP pilot versus replace the training program. The content outline for the NRP was determined based

on a synthesis of evidence from a review of literature and synthesis of recommendations from the interviewed stakeholders.

Content. The NRP pilot content was designed to "deliver content on leadership, patient safety and professional development" (Cline et al., 2017, p. 384). Important elements focused on clinical practice and professional development are included (Cline et al., 2017). Additionally, the NRP includes education regarding resiliency to set newly graduated nurses up for successful independent practice (Mills et al., 2018). Education regarding communication skills to be applied to physicians and other healthcare providers is also included (Cochran, 2017).

Opportunities for professional exploration are available to the participants in NRPs so that they may develop critical thinking skills (Phillips & Hall, 2014). Rationales for decisions made will be discussed and understood (Blevins, 2016). The program also includes other learning activities such as journaling and role playing (Phillips & Hall, 2014).

The NRP will teach the participants clinical specialization for the dialysis setting (Rosenfeld & Glassman, 2016). The curriculum will be relevant to the participants' daily practices (Zinn et al., 2012). The participants will learn how to prioritize care and develop leadership skills throughout the program (Zinn et al., 2012). The program will allow the nurse residents opportunities to interact with each other and reflect on their experiences (Cochran, 2017). The participants will also be provided with opportunities to interact with leaders in the organization (Rosenfeld & Glassman, 2016).

Clear themes regarding content also emerged from the stakeholder interviews. The stakeholders identified stress-management as a high priority for the NRP participants. Care for dialysis vascular accesses was also identified as an immediate clinical educational need and recommendations were made that the NRP participants observe in dialysis vascular access

centers. The stakeholders also identified assessment and critical thinking skills as developmental opportunities for new nurse graduates.

Patient safety and quality elements were also identified as high priority clinical learning needs for the NRP participants. Recommendations were provided to have the NRP participants observe in interprofessional meetings to understand the process to create and implement plans of care for patients in the chronic dialysis setting. Patient-centered care was also recommended as content to be covered.

Communication and leadership skills were also common themes that emerged from the stakeholder interviews. The stakeholders shared their opinions that new nurses may not be prepared to have challenging conversations or delegate effectively. Specific recommendations for content included physician relationships, conflict resolution, and emotional maturity.

The interviewed stakeholders felt strongly that a significant portion of time should be dedicated to learning and experiencing other dialysis therapies including peritoneal dialysis, home hemodialysis and transplant. Each felt that knowledge in these areas would support the nurses in having meaningful conversations with their patients about renal replacement therapy selections. Additionally, the stakeholders identified that the NRP participants should observe dialysis in the inpatient setting to facilitate more effective transitions of care for patients between hospitals and chronic dialysis facilities as well as contribute to reducing hospitalizations.

Opportunities for further growth and development was also a recommended topic by the stakeholders. Specific topics for inclusion for this content included certifications in nephrology nursing, participation in professional nursing organizations and awareness of internal leadership development programs. The stakeholders felt knowledge of these opportunities to expand

professional practice would engage the participants in further growth and development once the NRP had concluded.

Length of NRP. The length of 12 months for this NRP pilot program design was based on other successful designs in which NRP cohorts met monthly for up to eight hours at a time for one year (Cline et al., 2017). Other literature also supported the need for most newly graduate nurses to have at least one year of experience to become proficient in their roles (Zinn et al., 2012). This length of time was consistent with the opinions of the stakeholders interviewed for this project.

Infrastructure. Regarding the program's infrastructure, the stakeholders recommended significant time for peer interaction to be allotted during NRP meetings. They also recommended that one nurse leader facilitate and mentor the group for the entire course of the year. To fully engage the NRP participants, the participants will be assigned dates in which they will deliver a presentation to the cohort regarding their learning experiences.

Recommendations were made that the NRP participants have unique opportunities to interact with leaders in the organization. From a logistical perspective, the stakeholders identified the importance of creating a schedule of events for the full 12 months and making those available to the residents and managers at the start of the pilot. Many of the stakeholders also recommended having a thoughtful graduation ceremony at the end of the program and allowing the participants to invite guests to celebrate with them.

Facilitator. Of highest importance to a NRP is selection of the nurse leader who will facilitate the NRP pilot group (Cochran, 2017). The facilitator who was selected for the NRP pilot has demonstrated attributes of effective mentors. An example of an effective attribute of an effective nurse mentor is demonstrated competency in nurturing newly graduated nurses (Phillips

& Hall, 2014). NRP facilitators should also be respected by peers and leaders (Smith-Trudeau, 2014). Additionally, effective nurse mentors actively listen to others and effectively provide feedback (Smith-Trudeau, 2014).

Setting

This project will have multiple settings within the ICHD setting. The primary setting will be the ICHD facilities where the NRP participants are receiving their training and apply knowledge from the NRP. The NRP meetings and lunches will be conducted in a conference room housed in a large dialysis facility. There will be multiple observational experiences which will be held outside of the ICHD facility. These include observations in the following settings: dialysis vascular access center, home dialysis or transplant clinics and inpatient dialysis.

Population

The population for this pilot NRP program will include RNs who have passed their state nursing board examinations within 18 months or less from the date of enrollment or who have graduated an accredited school of nursing and are scheduled to complete their state nursing board examinations within three months of their graduations. Specifically, up to 10 newly graduated RNs meeting this criteria will be accepted into the pilot program. RNs who are currently employed in the organization will be considered for inclusion.

Admission into the pilot program will be determined by the hiring managers for the dialysis facilities in the geographical region. A single facility may have more than one NRP participant, however, the geographical region will not exceed 10 participants. The program will be advertised to nursing students who attend the five nearest nursing schools to the geography.

Tools

A new tool for measurement will be created for this project. The tool is an evaluation form to measure two of the project's three objectives. These objectives are the measurements of the effectiveness of each monthly training and the assessments of the participant's commitments to remain employed with the organization for at least 12 months.

To measure effectiveness of the monthly trainings, the participants will be asked to rate the effectiveness of the training on a Likert scale of one to five. A score of one indicates the training was extremely ineffective, three is average and five indicates the training was extremely effective. To measure the participants' intention to stay employed with the organization, the participants will answer yes or no to the question "I intend to remain employed by the organization for at least 12 months."

The tool created to measure these objectives will be a one-page document (see Appendix A). The title of the document, nurse residency program monthly assessment, will be typed on the top of the document. There will also be space for the facilitator to fill in the particular month's topic prior to passing out the documents to be completed. Participants will not write their names on the documents as their answers will be kept anonymous and confidential.

In addition to the facilitator verbally sharing with the participants that their answers will be kept anonymous and confidential, a statement of this nature will also be written on the document. The statement will read that the information obtained from the survey will be kept anonymous and confidential. Also written will be the statement that the information is being obtained by the organization to evaluate the effectiveness of the NRP, not to evaluate any particular individual's response. The documents will be collected by the facilitator, combined

with all other collected documents, and delivered unopened for data aggregation. After data compilation, the original scoring documents will be stored in a locked and secure location.

Project Plan

Description of interventions. For this NRP pilot, a cohort of no more than 10 newly graduated RNs will be created to progress through a 12 month NRP. This program will be facilitated by an enthusiastic nurse leader who demonstrates effective attributes of nurse mentors and has the capacity to facilitate monthly meetings for 12 months. This NRP will occur in parallel to the LDO's traditional onboarding and training processes for newly graduated RNs.

The NRP cohort will meet for five hours once monthly for 12 months. The sessions will be arranged to allow for two hours of classroom and discussion, one hour of lunch and lunch presenter, followed by two more hours of classroom and discussion before adjourning. Each month, the content will be different and relevant to the success of the participants. A meeting schedule for the entire 12 months will be provided to the participants and their managers upon acceptance into the NRP to avoid scheduled conflicts. In the event of schedule conflicts, the NRP will take priority.

Although the content will vary, the structure of each monthly meeting will be the same. Each month, the participants will have the opportunity to engage in group dialogue with their peers and the facilitator. The participants will reflect on their own experiences regarding the previous months' topic and learn from the experiences of their peers. They will share new knowledge learned and have the opportunity to ask questions of the group and the facilitator.

The participants will be provided with journals to document their notes from the monthly meetings as well as record experiences and questions for which they wish to discuss during group sharing each month. Additionally, for experiences which will be required to be scheduled

outside of the traditional ICHD facility training process, each participant will leave the monthly meeting with their experiences already scheduled to reduce the stress of having to make these appointments. Each month, the outcomes measurement tool will be completed by the participants to measure the effectiveness of the education as well as the participants' intentions to remain employed with the organization (see Appendix A).

For each of the 12 monthly meetings, a leader within the organization will join the group for a one hour discussion over lunch. This will provide the NRP participants with unique exposure to those in leadership positions. These leaders will include both nurse and non-nurse leaders. Each leader will open by sharing information that is relevant to the group and allow time for discussion with the group over lunch.

The 12 months of content will include the following topics in chronological order: introduction to the organization, self-care and resiliency for nurses, dialysis vascular accesses, patient safety and quality, assessments and critical thinking skills, interprofessional collaboration, and physician relationships, leading the dialysis team and conflict resolution, home dialysis therapies and transplant, chronic kidney disease and patient education, transition of care and acute inpatient dialysis, patient-centered care, advancing professional practice, and graduation.

For the first month's content, introduction to the organization, content from an already existing program in the organization will be used to introduce the participants to the organization. Additionally, a meaningful amount of time will be spent on introductions and conversation so the individuals in the cohort can learn about one another. Contact information for the participants will be collected. The facilitator will explain the components of the

residency program and set expectations for the nurses. Also, the organization's nursing strategy will be presented to and discussed within the group.

Self-care and resiliency will be the topic for the second meeting of the NRP cohort. During this time together, the participants will reflect on their experiences over the past month. Already-developed organizational content regarding life and work alignment will be presented and discussed. The participants will create plans to manage stress and balance their work and personal lives. The participants will also engage in content regarding emotional maturing which is also already developed within the organization.

For the third month's topic, dialysis vascular accesses, the group will engage with a guest speaker from a dialysis vascular access intervention center. This guest speaker will be either an interventional nephrologist or RN from the center who will discuss in detail the anatomy and physiology of the different types of dialysis vascular accesses. Case studies regarding assessments which resulted in dialysis vascular access interventions will be presented with supporting imagery to illustrate the descriptions. The nurses will be educated in great detail how to assess and care for dialysis accesses. Following this content and discussion, the nurses will each schedule an appointment to observe interventions at the dialysis vascular access center.

In month four, patient safety and quality will be the topic for the NRP meeting. Pre-existing material will again be used for this meeting. The participants will learn the details of publicly reported data for dialysis providers. They will learn best demonstrated practices for managing the most important outcomes for patients' safety and quality. They will also learn the details of the organization's internal quality measurement processes such as governing body and interdisciplinary quality and plan of care meetings. In addition to discussing their experiences

regarding the prior month's topic, the NRP participants will also share their experiences observing in the dialysis vascular access center.

Month five will consist of education regarding assessments and critical thinking skills. Using existing content in the organization, the participants will sharpen their assessment skills. They will review and engage in case studies to understand assessment findings and related interventions. Additionally, they will receive detailed education in emergency procedures.

Interprofessional collaboration and physician relationships will be the topic of learning for month six. The facilitator will present the interprofessional collaboration portion of the content. Each role in the dialysis facility will be reviewed and education regarding effective collaboration competencies will be presented. This content will need to be developed as it does not currently exist in the organization. For the physician relationships portion, this information will be presented by a physician. This will allow for interactions between the nurse residents and the physician to directly address topics of interest to the residents. Following the review of content and discussion, the participants will schedule themselves to each attend one interprofessional team meeting to observe the team's interactions.

Month seven will present the participants with education and guidance regarding nurse leadership on the dialysis treatment floor. Using already existing content, the participants will receive education in conflict resolution and delegation. Role playing will be used as a method to strengthen conflict resolution skills for the nurse residents. The participants will also share their experiences in observing interprofessional team meetings.

In month eight, guest speakers will again be utilized to engage with the NRP participants. Nurses from both the peritoneal dialysis (PD) and home hemodialysis (HHD) settings will provide education regarding their specialized dialysis modalities. This content currently exists in

the organization. Additionally, a transplant coordinator will provide information regarding kidney transplantation. Having these expert guest speakers present the information will provide for engaging discussion with the nurse residents. Following the content sharing and discussion, the nurse residents will schedule themselves to observe for a day in either the PD, HHD or transplant clinic setting.

Chronic kidney disease and education will be presented in month nine. The chronic kidney disease education will be delivered by a nephrologist or nurse practitioner who practices in that setting. The education for individuals with chronic kidney disease content will be delivered by a patient educator. The cohort will also share their experiences from their home dialysis clinic observations. Following content delivery and discussion, the NRP participants will each schedule themselves to observe a patient education class.

In month 10, the NRP participants will learn about transitions of care for patients and acute inpatient dialysis. For the transitions of care content, the nurses will learn how to effectively transition patients into ICHD facilities following hospitalizations for existing patients or admissions to ICHD facilities for patients new to outpatient hemodialysis. This information will be provided by the facilitator. Education regarding acute inpatient dialysis services will be provided by an acute dialysis nurse or nurse leader. This will allow the presenter to integrate personal experiences into the presentation. For both topics, content already exists in the organization. The group will also engage in discussion regarding their experiences observing patient education classes. Following content delivery and discussion, the nurse residents will schedule themselves to observe inpatient dialysis treatments.

For month 11, the NRP cohort will be presented with information on patient-centered care. The facilitator will be present this education with already developed content. The

facilitator will also be joined by a dietitian and social worker who will each explain how their professions contribute to patient-centered care. Interactive discussion regarding time spent in the inpatient dialysis setting will occur. The NRP participants will schedule themselves to follow dietitians and social workers, each for one day, to observe their work in action.

After 11 months of content delivery, discussion and interactive learning experiences, the NRP participants will enter their twelfth and final monthly meeting of the NRP. The first portion of the day will include education regarding professional development opportunities such as how to achieve certifications in nephrology nursing. The cohort will then discuss their experiences following social workers and dietitians, as well as discuss their experiences with the NRP in general. Following the content, discussion, and survey completion, the nurse residents will be joined for lunch by an organizational leader and each a guest of their choosing for their NRP graduation. The graduation will be a time of reflection and celebration of accomplishments over the past year. Each NRP graduate will be presented with a graduation certificate and have their photos taken and placed in memorable frames as keepsakes. At this point, the NRP will have concluded for the participants.

Implementation process. To implement the NRP, the facilitator will begin by scheduling the 12 months of meetings to reserve the conference room where the meetings will be held and to reserve the time of both the guest speakers and lunch presenters. Content that is already developed will be aggregated and stored on one shared drive so it is accessible for the NRP cohort meetings. The conference room where the pilot program will be conducted is equipped with a projector for PowerPoint presentations and speakers for sound.

In addition to scheduling the presenters, meetings will be conducted with each of the guest and lunch presenters to review the NRP overall as well as specifically discuss the content

each presenter will present and how that content integrates into the program. For monthly topics that do not have existing content, the facilitator will collaborate with subject matter experts to create the content for those sections.

The facilitator will also meet with the managers of the NRP participants to set expectations. The NRP meetings must take priority over other work related obligations. The time that the NRP participants spend in the program, through meetings or observations, is paid time and their facilities' cost centers will be charged for that time.

The 12 month schedule will be provided to the managers for scheduling purposes. The schedules will also identify the content for each monthly meeting so that the managers may engage with their employees regarding the content. Additionally, each manager will be provided with talking points to share with their teams so that the teams understand the NRP and why the NRP participants will be absent from the facilities for educational opportunities some days.

The human resources analytics team will also be educated on the NRP pilot program. Engagement with this team is important as this team will be responsible for collecting and reporting the turnover data to identify differences for these data points between the nurses in the NRP pilot and those who were not in the pilot. Familiarity with the program will allow the analytics team to better translate data into findings.

Additionally, the recruiting team will be made aware of this program. This will allow the recruiters to market the NRP and recruit for newly graduated nurses who will excel in this program. The recruiting team will learn from their experiences during the pilot and apply process improvements when the NRP expands beyond the initial pilot program.

Outcomes that will be measured. The facilitator will measure attendance at the NRP meetings by the participants. Additionally, completion of assigned activities will be measured. These will be measured to ensure participation in the program.

Also, three specific objectives for the NRP will be measured. First, NRP participants will demonstrate a decrease in turnover of at least 10 percent at three, six, 12, and 24 months of employment each when compared to newly graduated nurses who have not completed the NRP. Second, NRP participants will score the effectiveness of each monthly training as greater than a three average on a Likert scale of one to five following each month's training. Third, 90 percent of the participants will the answer yes to the question "I intend to remain employed in this organization for at least 12 months" following each month's training.

Procedures for data collection. The data collection for attendance at meetings and participation in assigned activities will be manually tracked by the facilitator for the pilot program. Absences or failure to complete assigned activities will be reported to the manager of the affected NRP participant. If significant attendance issues or failures to complete assigned tasks occur, retention results for the affected individuals may not be included in the final outcome measurement for the program. Participants will be removed from the NRP if they reach three absences from the monthly program.

Data to measure turnover will be collected by the organization's human resources analytics team. The individuals in this department have access to the information used to determine the difference in turnover percent between the NRP participants and those who have not completed the NRP. Reports will be provided by this team at three, six, 12, and 24 months to review the turnover data. The data will be compared to turnover data for newly graduated nurses who have not participated in the NRP. The data to measure effectiveness of education provided

and likeliness to remain employed with the organization will be collected and aggregated by the NRP facilitator following each month's training session.

Evaluation and sustainability plan. Evaluation of the program will formally occur at three, six, 12, 24 months when data is reviewed to determine if objectives are met. If the expected outcome that turnover is ten percent less for the NRP cohort is not attained at any measured point in time, the content and design of the NRP will be reevaluated. At 18 months, if retention has decreased from retention at 12 months, a complementary program may be implemented to bridge support of newly graduated nurses from 12 months to 24 months. In addition to the identified objectives of the NRP, participants will demonstrate a decrease in turnover of at least 10 percent at three, six, 12, and 24 months of employment each when compared to newly graduated nurses who have not completed the NRP, NRP participants will score the effectiveness of each monthly training as greater than a three average on a Likert scale of one to five following each month's training and 90 percent of the participants will the answer yes to the question "I intend to remain employed in this organization for at least 12 months" following each month's training, the NRP may contribute to an overall improvement in nurse retention. Currently, RN retention is 75 to 75 percent for the LDO. The RN retention goal for the LDO is 82 percent.

Regarding sustainability of the program following the pilot, the NRP will be expanded beyond Northern Illinois. In order to accomplish this, more nurse facilitators will need to be involved. The expansion of the NRP may involve the same content and design as the pilot, or the content and design may be improved based on feedback from pilot participants or failure to obtain objectives.

Timeline. Upon approval, the project can be implemented immediately (see Appendix B). Existing employed nurses who meet criteria for inclusion will be notified in March. To make nursing students aware of the NRP, appointments will be made to be on site at nursing schools to share information in March as well. Applications to participate from nursing students will be accepted immediately following nursing school presentations. Candidates will be reviewed and offers extended in April. The NRP pilot sessions will begin in May. The project will be formally evaluated at three, six, and 12 months and completed at 24 months.

Data Analysis

Data analysis will be conducted following data sharing from the human resources analytics team. The analysis will entail comparing turnover rates and for the NRP pilot participants compared to those who have not completed the NRP at three, six, 12, and 24 months. This is secondary data that the organization already collects. The retention goal is to demonstrate a decrease in turnover of at least 10 percent at three, six, 12, and 24 months of employment each when compared to newly graduated nurses who have not completed the NRP.

To measure effectiveness of the monthly trainings, the participants will be asked to rate the effectiveness of the training on a Likert scale of one to five. A score of one indicates the training was extremely ineffective, three is average and five indicates the training was extremely effective. To measure the participants' intention to stay employed with the organization, the participants will answer yes or no to the question "I intend to remain employed by the organization for at least 12 months."

Participants will not write their names on the documents as their answers will be kept anonymous and confidential. In addition to the facilitator verbally sharing with the participants that their answers will be kept anonymous and confidential, a statement of this nature will also

be written on the document. The statement will read that the information obtained from the survey will be kept anonymous and confidential. Also written will be the statement that the information is being obtained by the organization to evaluate the effectiveness of the NRP, not to evaluate any particular individual's response. Also noted will be that the documents will be collected by the facilitator, combined with all other collected documents and delivered unopened to the author of this proposal for data aggregation.

To maintain the integrity of confidentiality, upon completion of the documents, they will be collected by the facilitator and placed in sealed envelope. The envelope will be hand delivered to the author of this proposal. The results will then be averaged by the author of this proposal. After data compilation, the original scoring documents will be stored in a locked and secure location.

For the objective to demonstrate a decrease in turnover of at least 10 percent at three, six, 12, and 24 months of employment each when compared to newly graduated nurses who have not completed the NRP, the turnover for both the pilot group and control group will be entered into a Microsoft Excel spreadsheet. The information for the spreadsheet will be obtained from a document provided by the human resources analytics team. A line graph will be created from this spreadsheet to allow for a visual illustration of turnover for each group and to emphasize any differences between the two groups. .

To demonstrate how NRP participants have scored the effectiveness of each monthly training, the Likert scale scores of one to five following each month's training will be entered into a Microsoft Excel spreadsheet. The scores for each month will be averaged. The average scores by month will be plotted on a line graph for easy visualization of compiled results. As the

objective goal is an average monthly score greater than three, a solid line will be presented on the graph to represent this threshold for success.

For the third objective in which the goal is that 90 percent of the participants will the answer yes to the question “I intend to remain employed in this organization for at least 12 months” following each month’s training, these individual yes or no answers will be recorded into a Microsoft Excel spreadsheet. The number of answers that are no and the number of answers that are yes will be tallied and reported as a percent of participants for each answer. The results will be transferred from the spreadsheet into a pie chart to quickly identify the percentage of participants who have responded each way.

Ethical Issues

Privacy and confidentiality. The facilitator of the NRP cohort will lead a discussion with the participants regarding confidentiality and the importance of providing a safe place for discussion within the NRP. During that discussion, the facilitator will encourage the participants to commit to keeping information shared during the NRP meetings confidential. No formal agreements will be signed.

All retention data will be aggregated and reported for the entire cohort and individual participant’s information will not be measured. Retention data is secondary and is de-identified. This is information that the organization already collects.

The documents used to measure effectiveness of the monthly trainings and participants’ intention to stay employed with the organization will be handled anonymously and confidentially. Participants will not write their names on the documents and will circle their answers so handwriting cannot be identified. In addition to the facilitator verbally sharing with the participants that their answers will be kept anonymous and confidential, a statement of this

nature will also be written on the document. The statement will read that the information obtained from the survey will be kept anonymous and confidential. Also written will be the statement that the information is being obtained by the organization to evaluate the effectiveness of the NRP, not to evaluate any particular individual's response. Also noted will be that the documents will be collected by the facilitator, combined with all other collected documents and delivered unopened for data aggregation.

To maintain the integrity of confidentiality, upon completion of the documents, they will be collected by the facilitator and placed in sealed envelope each month. The envelope containing the documents will be hand delivered and the results will then be averaged. After data compilation, the original scoring documents will be stored in a locked and secure location.

Institutional Review Board Approval

Assurance of the protection of human subjects involved in this project was essential to the project's development and implementation. While no untoward effects to subjects were anticipated, subjects were asked to provide information with their intentions to remain employed with their employer as well as score the effectiveness of learning modules. To collect this information in a way that protected the human subjects, institutional review board (IRB) approval was warranted.

IRB approval was sought by the Bradley University Committee of Use of Human Subjects in Research (CUHSR). Prior to seeking IRB approval, the project was presented to and approved by the associated doctorate of nursing practice (DNP) project team. IRB approval was granted by CUHSR and the study was found to be exempt from full review under Category 2 (see Appendix C).

Chapter III: Organizational Assessment and Cost Effectiveness Analysis

Organizational Assessment

Readiness for change. The organization is ready for change. In the past year, an initiative focused on recruiting newly graduated RNs was launched. The organization is also committed to improving RN retention as evidenced by the creation of a new position of vice president of nursing and investing in programs to retain nurses within the past 12 months. These programs include reimbursement for certifications in nephrology nursing, scholarships for nurses to attend professional nursing conferences and leadership development programs to transition RNs into managerial roles.

The organization's readiness to change and implement a NRP pilot was also confirmed through the stakeholder interviews. All interviewed stakeholders recognized the importance of integrating newly graduated RNs into the organization's nursing workforce and were encouraging and supportive of the recommendation to implement a NRP. The organization has also set goals for RN retention and leaders are holding their teams accountable to those goals. As such, the NRP pilot will be a welcome addition to the organization's portfolio of nurse development programs.

Barriers and facilitators to implementation. There will be barriers and facilitators to implementation of the NRP. An example of a barrier will be prioritization of NRP activities over direct staffing when staffing pressures occur. To overcome that barrier, the expectation that NRP activities take priority will be set with participants and their managers upon initiation of the program. Additionally, the facilitator will measure attendance and participation in NRP activities. A second barrier may be the cost of the program. Despite the incremental cost,

organizational leaders should be educated regarding the long term financial savings associated with nurse retention.

A facilitator to implementation will be the proven success of NRPs. Leaders in the organization are held accountable to the performance regarding nurse retention. As such, they may be likely to support NRPs in their areas of responsibility. Secondly, another facilitator to implementation of the NRP will be the ease of implementation due to the well-structured and prepared content. The full 12 months of content for the NRP is prepared and can be implemented in most geographies without significant heavy lifting. With the content already created and mapped out, leaders may be more likely to implement NRPs in their areas.

Role of interprofessional collaboration. Interprofessional collaboration is imperative to the success of the NRP. A significant amount of the monthly content is focused on interprofessional relationships and partnerships to advance patient care. According to the Nephrology Nursing Code of Ethics, nephrology nurses must collaborate with other professions to promote health (Gomez et al., 2017).

The NRP positions newly graduated nurses to be competent and collaborative professional nurses. Included in the NRP are multiple opportunities for the nurses to job shadow different professions such as dietitians and social workers. The participants will learn skills to successfully communicate with physicians and other members of the healthcare team. Additionally, the nurses will have the opportunity to explore the work of professionals outside of the ICHD setting for which they have been hired to work in.

The NRP will contribute the understanding and accomplishment of multiple core competencies of interprofessional collaborative practice for the participants. As identified as a core competency by the Interprofessional Education Collaborative (IEC), the nurses will

understand the work of and learn how to work with other professions in a respectful way through education and observational experiences (2011). The participants will learn and practice communication skills to effectively collaborate with other professions through education and role playing (IEC, 2011).

The nurses will also learn how to effectively communicate with patients in a manner that supports a team approach to patient care through education regarding patient-centered care and experience in settings beyond ICHD in which they will complete their daily work (IEC, 2011). The participants will also learn how to apply leadership skills and reflect on their contributions to the team through skill building in these areas during the NRP (IEC, 2011). The NRP will provide the participants with intentionality in developing these skills to accomplish these competencies.

Cost Factors

Budgetary needs. There are budgetary needs for this program (see Appendix D). The labor hours dedicated to the NRP by the participants are an example. For each participant, the monthly expense per RN is expected to be $150 assuming each RN has an hourly rate of $30 and will participate for 5 hours per monthly session. Assuming 10 nurses participate, the monthly expense for wages will be $1,500. This is an annual expenditure of $18,000. The facilitator's wages will not be incremental as the training of new nurses in included in the scope of practice for this individual.

There will be additional costs for the journals which will total $200. There will also be 12 lunches, including the graduation lunch. Each monthly lunch will be $216 to include the costs for the participants, facilitator, and guest speaker. The graduation lunch will total $396 to

accommodate the graduates' guests. Ultimately, the total incremental expense will be $21,188 for the full 12 month time period providing 10 nurses participate in the NRP.

Cost avoidance or savings associated with implementation. To train a newly graduated RN in dialysis, the labor costs alone for a nurse who makes $30.00 per hour are $14,400 for 12 weeks not including benefits. For 10 nurses, the labor costs are $144,000. The process to hire and train replacement nurses costs anywhere up to $88,000 (Li & Jones, 2013). For 10 nurses, this total is $880,000. As such, the NRP may yield a savings of $880,000 with an incremental investment of $21,188 upon the expected costs of $144,000. Through retaining the nurses who have participated in the NRP, the organization will save a substantial amount of money that would have otherwise been invested in recruiting, hiring and training 10 replacement nurses. As the NRP pilot expands and includes more participants, the savings in hiring and training replacement nurses will continue to exponentially grow.

Chapter IV: Results

Analysis of the Implementation Process

Amendments to the intended design implementation were necessary to begin the nurse residency program. RNs were selected by their managers for participation. These RNs, however, were not brand new to the organization. The participants did meet the criteria of having been licensed nurses for less than 18 months.

Also, alterations to the intended timeline were necessary as delays presented to identification of participants. RN identification occurred during the month of June and the first NRP class occurred in July, which was two months delinquent to the intended May start date. As such, NRP classes were conducted in July, August, and September and remain in progress as of the writing of this paper.

Two RNs were selected for participation. This met the criteria for 10 or less participants. Due to the small number of participants, the classes were not scheduled one year in advance. Instead, they were scheduled singularly. The managers of the participants were flexible, and therefore, there were no absences as a result.

Conference room utilization did not present any issues. For each NRP course, appropriate facilities were available for use. The sessions were predicted to be five hours in length. However, the information and discussion was able to take place in a shorter period of time. Four hours, rather than five hours as previously planned, three hours of content and one hour for lunch and networking, was sufficient for full review of content and engaging dialogue. This may have been related to the small number of participants.

During the three sessions, it was identified that purchasing lunch for all of the employees at the dialysis facility where the NRP sessions occurred may create excitement about the program beyond the participants. Due to the small number of participants, for each session, lunch was provided for all employees working in the facilities without exceeding the total lunch dollars allocated. The responses from the employees who were not participating in the NRP including one patient care technician who was in nursing school, were positive. In the future, when sessions are held in dialysis facilities, including the entire teams in lunches may be considered to generate comradery and create a welcoming environment for the new nurses.

Alterations to content were also made during the pilot program. For the first month's session, the organization's nursing strategy was presented as planned. Additionally, a one page document outlining the key nursing initiatives and programs for the organization was presented and reviewed. This review generated significant interest and dialogue with the participants. As such, incorporation of this document will be included in future revisions of the program.

Additionally, time allowed for demonstrations on how to access further information regarding these initiatives and programs on the organization's intranet. Participants verbally shared that this live demonstration was helpful and increased their confidence to learn more about these programs. This demonstration will also be included in future first month sessions.

The second month's content also revealed opportunity for improvement. Self-care and resiliency were the topics for this session. The participants provided feedback during this session indicating that they had two specific areas of interest regarding self-care and resiliency. These areas included time management and adapting to the schedule of a nurse who works in an in-center hemodialysis facility. The first area is due to the number of activities nurses balance in the dialysis setting and the latter is because the participants had struggled to adapt to a schedule in which they awake early enough to arrive at work by 4:30am. For both topics, the participants shared struggles they had encountered and how they had overcome the challenges in which they had solved. For their challenges that remain unsolved, they were interested in solutions. While the content that was presented resonated with them, the participants were seeking more tactical approaches to self-care and resiliency. Changes will be made accordingly for future sessions.

The planned month three content included education regarding dialysis vascular accesses and observation of procedures in the dialysis vascular access intervention center. As the nurses selected for participation were already employed with the organization, they had previously observed at and received education from the team at the dialysis vascular access intervention center. To allow for the presentation of new information, month four content was presented during the third session. The month four content included presentation on patient safety and quality. The information was well received by the participants. This was an important discovery in that the sessions can be flexible in the order that they are presented should the need arise.

Analysis of Project Outcome Data

Multiple objectives were determined to measure the success of the NRP. First, NRP participants will demonstrate a decrease in turnover of at least 10 percent at three, six, 12, and 24 months of employment each when compared to newly graduated nurses who have not completed the NRP. Second, NRP participants will score the effectiveness of each monthly training as greater than a three average on a Likert scale of one to five following each month's training. An average score of greater than three will represent that the program viewed as above average in effectiveness by the participants. Third, 90 percent of the participants will the answer yes to the question "I intend to remain employed in this organization for at least 12 months" following each month's training.

The first outcome is not measurable at this time as the NRP has not concluded so post-NRP turnover cannot be measured and compared to other populations. The second outcome, measuring the effectiveness of each session, was measured utilizing the measurement tool designed for this project. For each of the three sessions, nursing strategy, self-care and resiliency, and patient safety and quality, the average score was a five on a Likert scale of one to five. This indicated that although opportunities for improvement to the material were discovered, the content and discussions were useful for the participants. For the third outcome, regarding intention to remain employed, for each session 100 percent of the participants (*N*=2) intended to remain employed in the organization for at least 12 months. These results are summarized in Table 1 and Table 2.

Table 1

Effectiveness of NRP Sessions

	Session 1	Session 2	Session 3
Tool A	5	5	5
Tool B	5	5	5
Average score	5	5	5

Note. Scores are averaged from 1-5 Likert scale. 1=not effective and 5=extremely effective.

Table 2

Intention to Remain Employed with the Organization for at Least 12 months

	Session 1	Session 2	Session 3
Yes	100%	100%	100%
No	0	0	0

Note. N=2.

Chapter V: Discussion

Findings

Changes in care delivery and clinical outcomes. The goals of the NRP include to decrease nurse turnover by at least 10 percent at three, six, 12, and 24 months of employment, have participants score the effectiveness of each monthly training as greater than a three average on a Likert scale of one to five, and have 90 percent of the participants answer yes to the question "I intend to remain employed in this organization for at least 12 months" following each month's training. Per the measurement tool developed for this project, the NRP content is

effective as the average score for each session was a five on the Likert scale of one to five. Also, one hundred percent of the NRP participants intended to remain employed with the organization for the next 12 months.

While retention post-NRP cannot be measured as the program is still in progress, the other obtained results suggest that implementation of a NRP in the ICHD setting will improve the retention of new nurses. To date, all NRP pilot participants are still employed by the LDO. Nurses who complete the NRP are trained to provide safe and effective patient care through additional education regarding care of dialysis vascular accesses, comprehensive patient assessments, and patient-centered care. The LDO in which the NRP occurs in will experience better patient outcomes and increased patient satisfaction as a result.

Successes and difficulties. The implementation of the pilot NRP presented both successes and difficulties. The participants were engaged with the facilitator. They asked relevant questions and shared experiences during discussions. Prioritization of NRP activities over direct staffing was initially identified as a potential barrier to implementation, however, the participants' managers were supportive of the nurses' participation in the program and the nurses attended all sessions.

The pilot program's cost did not exceed budget which is also a success. Facilities for the NRP sessions were easily obtained. The content was determined to be useful and effective for the participants as per the scores obtained via the measurement tool. The participants also provided recommendations to improve the content further, particularly regarding the self-care and resiliency material.

There were some difficulties to implementation of the program. Timing the initiation of the NRP with hiring of new graduate nurses proved to be a challenge that could not be overcome.

As such, the RNs who participated were licensed nurses for less than 18 months, however, they were not brand new to the organization. Also, a delay in participant identification resulted in a delayed start to the program by two months.

The content for the NRP was altered to avoid redundant experiences for the participants. The planned month three content included education regarding dialysis vascular accesses and observation of procedures in the dialysis vascular access intervention center. As the nurses selected for participation were already employed with the organization, they had previously observed at and received education from the team at the dialysis vascular access intervention center. To allow for the presentation of new information, month four content regarding patient safety and quality was presented in place of the dialysis vascular access content. As such, the dialysis vascular access content was not reviewed and scored by the NRP participants.

Effectiveness of intervention. As measured by the accomplishment of the project's goals, the NRP is an effective way to improve retention of new graduate nurses in the ICHD setting. The delivered content scored an average of five on a Likert scale of one to five regarding effectiveness. Additionally, 100 percent of the participants intend to remain employed with the organization for the next 12 months. Although the NRP is still in process, to date 100 percent of the participants remain employed with the organization.

Limitations

Limitations to and deviations from the project plan were encountered. The sample size of two participants is small and could have impacted the results. Also, the participants were not brand new nurses to the organization as originally intended which could have affected the results as they presented to the NRP with more experience than newer nurses would have. The delayed

start to the program was also a limitation as only three months of data was collected and effectiveness of the intervention could change over time.

Implications

Practice change. Early results suggest implementation of a NRP for new nurses will improve RN retention for the LDO in which it was piloted. To expand and sustain the program, more nurse facilitators will be needed. As the LDO is a national organization, a centralized train-the-trainer process would allow for significant and expedited expansion. The NRP content, including improvements identified during the pilot, should be stored on a shared drive for easy accessibility by facilitators and to allow for efficient updating as necessary.

The LDO's marketing and recruiting departments should collaborate in order to most effectively present the NRP as a unique opportunity to nursing students. Awareness of the NRP will assist in attracting new nursing talent to the LDO.

Future research. There are opportunities for interdisciplinary collaboration related to residency programs in this LDO. In addition to employing 18,000 RNs, the organization also employs 18,000 patient care technicians (PCTs). A potential clinical question for the PCT population is: Do new PCTs in the ICHD setting who complete one year residency programs experience longer retention in their roles at three, six, 12, and 24 months of employment than new PCTs who do not participate in residency programs? Research regarding residency programs for the PCT population may also reveal similar benefits observed as a result of NRPs including improved patient safety and outcomes, improved employee and coworker satisfaction, and increased PCT retention. In the LDO in which the NRP pilot is in process, upon completion of the NRP and assessments of retention at three, six, 12 and 24 months of employment, discussions for implementation of a PCT residency program will be warranted if objectives are

met for RNs. This will contribute new nursing knowledge as searches for research regarding residency programs for unlicensed personnel yielded minimal results.

Nursing. This project holds much significance for nursing. The outcomes RNs experience as a result of participation in NRPs translate into safer and better patient care. Delivering excellent care increases nurses' job satisfaction. Additionally, more tenured nurses experience higher satisfaction with nurses who have completed NRPs. As job satisfaction for RNs increases and RN turnover decreases, organizations can reinvest the exorbitant amount of money spent on RN turnover into programs and initiatives that support RN development and growth which will advance the profession of nursing.

RNs who have completed NRPs are also better prepared to participate in and lead interprofessional teams. They also, are more likely to become nurse leaders in the future. For advanced practice nurses (APNs), implementing NRPs will allow them to foster the next generation of nurse leaders. For future APNs, participation in NRPs today will allow them experiences that will contribute to their future development of nurse leaders.

Upon entering the workforce, new nurses may experience "reality shock" (Cochran, 2017, p. 55). APNs and nurse educators are well positioned to improve this transition from school to work through implementation of NRPs. NRPs include evidence-based curriculum to provide extended education and knowledge for new graduate RNs in areas such as clinical orientation, leadership, patient safety, and professional practice. These are areas in which APNs and nurse educators are uniquely positioned to educate and nurture new RNs through sharing evidence-based practice and their own nursing knowledge.

Health policy change. CMS requires that nurses must have "at least one year of registered nursing experience" before they can staff in dialysis facilities without another nurse

present (Peters, 2013, p. 21). Once a nurse has obtained this one year of nursing experience, the nurse can work in a dialysis facility without the need for a more experienced nurse to be present. During this one year period, newly graduated nurses can practice all aspects nursing once they have completed their training programs as long as they are supervised by a nurse with greater than one year of dialysis experience. During this year of required supervision, new RNs can enhance their skills beyond on-the-job learning through participation in NRPs.

The AACN, and other leading nursing organizations, have identified that NRPs for newly graduated nurses have proven to improve nurse retention and develop high quality nurses (AACN, 2017; Rhodes et al., 2013). Further policy development at state and national levels should be evaluated to bridge the transition from school to practice, both from educational and employer perspectives. Policy development that includes transition from school to practice for nurses and includes a variety of settings such as inpatient and outpatient.

Chapter VI: Conclusion

Value of the Project

This project is useful to healthcare and practice as nursing is the lynchpin of the healthcare system as they provide care to patients, lead other healthcare professionals, and collaborate with physicians to assess and plan care for patients. NRPs have shown to produce RNs who deliver safer and higher quality care to patients. Participants of NRPs have experienced increase job satisfaction which leads to improved retention. Improved retention saves the healthcare system money which can be better invested in other programs. Also, the healthcare system experiences better interprofessional collaboration from nurses who have completed NRPs. NRP graduates also are more likely to become nursing leaders who will lead the future of nursing practice and the healthcare system.

DNP Essentials

Implementation of this project has contributed to attainment of multiple DNP Essentials. Conditions for DNP Essential I: Scientific Underpinnings for Practice were met during this project. For this Essential, a nurse must be able to obtain new nursing knowledge and translate that knowledge into practice (AACN, 2006). Evidence of learning and translation of new knowledge into practice was demonstrated through utilization of Benner's Novice to Expert Model as a framework for the project.

DNP Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking is "critical for DNP graduates to improve patient and healthcare outcomes" (AACN, 2006, p. 10). To meet this Essential, graduates must be able to facilitate organizational changes to healthcare delivery to improve quality and economics (AACN, 2006). NRPs have demonstrated effectiveness in improving patient outcomes and reducing RN turnover which translate into better quality and financial savings. As this project progresses from pilot to organization-wide implementation, these same results are expected for the involved LDO.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice was also achieved during the course of this project. This Essential identified the imperative skills of using evidence obtained from research and knowledge-gathering to improve healthcare outcomes through turning knowledge into practice (AACN, 2006). The NRP piloted was designed based on evidence-based practice as well as incorporation of ideas and information form stakeholders specific to the ICHD and LDO's practice setting.

Through development of the tool to measure the success of the project, Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care was met. This Essential directs that students must design tools

which will contribute to administrative decision-making (AACN, 2006). The measurement tool designed for this course allows for data collection which will be compiled and utilized to demonstrate success of the NRP.

Significant interprofessional collaboration contributed to the development of the program's contents. Additionally, during participation in the NRP, participants are educated regarding how to best collaborate among other professionals. As such, Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes was achieved. This Essential requires graduates to play "a central role in establishing interprofessional teams" (AACN, 2006, p. 14).

The project also contributed to Essential VIII: Advanced Practice Nursing. This essential identified that a DNP graduate is "prepared to practice in an area of specialization within the larger domain of nursing" (AACN, 2006, p. 16). Also, to achieve this Essential, DNP graduates comprehensive and systematic assessments as well as link organizational, population, fiscal, and policy issues together (AACN, 2006). As evidenced by the information identified and implemented in this project, the piloted NRPs positively contributes as a piece of the solution to each of these issues as nurse retention better allows organizations to meet their healthcare quality, financial savings, and regulatory goals. This is because NRP graduates provide safer and higher quality care, they save their organizations money through reducing the costs associated with high RN turnover, and also, NRPs in the ICHD provide an opportunity for further skill development during the one-year period before a new RN is able to practice independently as per CMS.

Plan for Dissemination

The information presented in this scholarly project paper will be disseminated in multiple ways. An oral presentation of the material will be presented to the DNP project team with invitations to participate also extended to university students, faculty, and administration. Community members and employees of the LDO which participated will also be invited to attend this presentation. A separate presentation will also be provided for stakeholders in the LDO. Also, the opportunity to present this information at the National Kidney Foundation of Illinois annual inter-disciplinary conference will be sought. The project will also be submitted to Doctors of Nursing Practice, Inc. e-Repository.

Attainment of Personal and Professional Goals

Through completion of this project, I was able to accomplish both personal and professional goals. From a personal perspective, I was able to develop relationships with a variety of individuals, both internal and external to the LDO, which will be long-lasting. Also, a great sense of achievement has been experienced through the setting and achievement of a goal itself, which in this case was to accomplish the requirements to obtain a DNP degree. Professionally, a great sense of fulfillment occurred as a result of developing skills in research, both through reviewing written literature and also through interviews and observation. Additionally, as an advocate for advancing the practice and recognition of the nursing profession, I am proud to have developed a program which simultaneously improves the lives of patients and nurses, while identifying the critical role nursing plays in the healthcare system.

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Appendix A

Measurement Tool

Nurse Residency Program Monthly Assessment

You are invited to participate in a research study. The purpose of this study is to evaluate the effectiveness of this nurse residency program. This study consists of answering two questions on a handwritten survey. Your participation in this study will take approximately 5 minutes. This is an anonymous survey; there is no link between your name and the research record.] Taking part in this study is voluntary. You may choose not to take part, leave the study at any time or skip specific questions on the survey.

Questions about this study may be directed to Amanda Hale who is in charge of this study at (815) 312-7668 or amanda.hale@davita.com. If you have general questions about being a research participant, you may contact the CUHSR office at (309) 677-3877).

You are voluntarily making a decision to participate in this study. Your completion and submission of the survey questions below means that you have read and understood the information presented and have decided to participate. Your submission also means that all of your questions have been answered to your satisfaction. If you think of any additional questions, you should contact the researcher.

Monthly topic (to be filled in by facilitator) ____

Effectiveness of monthly training:

1 2 3 4 5

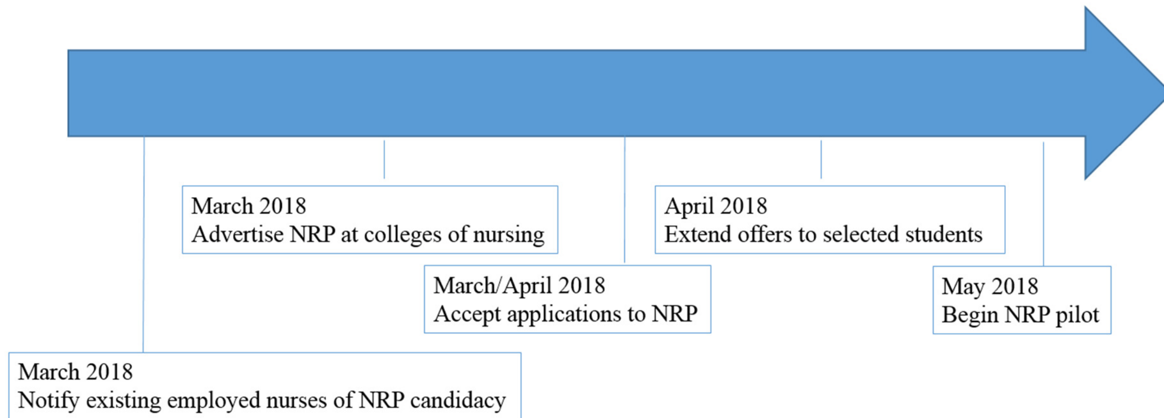
(1= not effective 5 = extremely effective)

I intend to remain employed with the organization for at least 12 months:

Yes No

Appendix B

Project Timeline



Appendix C

IRB Approval

Dear Investigators:

Your proposed study (CUHSR 15e-18) *Nursing residency programs in the hemodialysis setting* has been reviewed and was found to be exempt from full review under Category 2.

Your vita and ethics certificates are on file.

Be aware that future changes to the protocols must first be approved by the Committee on the Use of Human Subjects in Research (CUHSR) prior to implementation and that substantial changes may result in the need for further review.

While no untoward effects are anticipated, should they arise, please report any untoward effects to CUHSR promptly (within 3 days).

As this study was reviewed as exempt, no further reporting is required unless you change the protocol or personnel involved.

This email will serve as notice that your study has been reviewed unless a more formal letter is needed. Please let me know, and I will provide the letter.

Ross L. Fink, Ph.D.
Chairperson, CUHSR

Appendix D

Budget

NRP Pilot Budget				
Cost Item	Unit Cost	Quantity	Total Cost	Total Cost for Year
RN hour wages	$30	5	$150	$18,000
Journal	$20	10	$200	$200
Monthly lunch	$18	12	$216	$2,592
Graduation lunch	$18	22	$396	$396
				$21,188