Understanding and Combating New Graduate Nurse Turnover: A Quality Improvement and Policy Project

Matthew Nierengarten, BSN, RN

The College of St. Scholastica

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Dr. Rhea Ferry

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Abstract

Turnover is an all too common phenomenon in the field of nursing that negatively impacts almost all aspects of patient care, patient and employee satisfaction, and workplace quality metrics. Furthermore, turnover costs individual healthcare institutions across the United States millions of dollars on an annual basis. In order to combat turnover, one must understand why it exists. The aim of this project is to identify the root cause(s) of intent to leave as expressed by voluntarily terminated registered nurses within the target healthcare system/market within the first 24 months of employment after graduation and licensure. This will be done through an electronic survey, anonymously fulfilled by new graduate nurses at the end of their employment. The survey addresses over twenty different factors that may affect intent to leave or stay in any given registered nurse position. Questions will be proposed in the form of Likert-style questions with an optional narrative feedback response area for each question. Results will be evaluated with a t-test. All survey data results will be reported anonymously and reported in aggregate to add an extra layer of anonymity. The survey results will be evaluated with a t-test. Based on the analysis of the results, recommendations for policy change and practice adjustments will be made in an effort to curb new graduate nurse turnover within the healthcare system.

Keywords: turnover, new graduate nurse, quality improvement

Turnover within the nursing field is a well-known and widely accepted phenomenon. It has become commonplace in all fields of nursing and no facet of medical care is immune to the harmful effects. The new graduate (NGN) is particularly susceptible to turnover within the first 12- and 24-month periods of employment (*2018 Press Ganey Nursing Special Report*, 2018). NGN turnover affects patient care, workplace culture, financial solvency, and the total nursing workforce. Possessing a thorough understanding of the causes and effects of this problem is critical in constructing systems to recruit and retain talented, motivated, and empowered new graduate nurses to combat the turnover epidemic. This proposal will address a quality improvement project related to the development of a data collection tool and related policy to employ with exiting new graduate nurses within the healthcare organization in question in order to determine driving factors behind the intent to leave, This leads to the question: in a large midwestern healthcare organization, how does the implementation of a policy and tool that allows for the collection of data from voluntarily terminated new graduate nurses impact turnover rates for new graduate registered nurses as compared to current practices?

The Problem Identification/Available Knowledge

NGN turnover within the target healthcare organization sits at 38.6%, an unsustainable level; certain higher acuity and higher stress units like the Emergency Department and Mental Health units report rates over 50% (R. Kazik & J. Ohman, personal communication, January 22, 2021). Nursing Solutions Incorporated, a national nurse recruitment and retention firm, showed that in 2017, the national average turnover rate in the US for bedside nurses was 16.8% (*2020 NSI National Health Care Retention & RN Staffing Report*, 2020). The target healthcare

organization is well beyond the national average. Understanding the nature and causes of higher than normal turnover could and should help the healthcare organization begin to tackle this issue.

Literature Review

From a financial perspective, the healthcare organization is faced with the loss of millions of dollars on an annual basis as replacing an NGN can cost upwards of $90,000 depending on the level of training required for the position (*2018 Press Ganey Nursing Special Report*, 2018). In fiscal year 2019, one geographical market of the healthcare organization hired just shy of 500 new graduate nurses and lost nearly 200 of those new hires within 12 months, resulting in the loss of anywhere from $8,000,000-$13,000,000 (R. Kazik & J. Ohman, personal communication, January 22, 2021). Changing the turnover rate 1% in either direction results in either the loss or savings of $337,500 (*2018 Press Ganey Nursing Special Report*, 2018).

With increasing rates of retirement at younger ages, it is vitally important to the continued success of the healthcare organization to not only recruit but also retain new graduate nurses and continue to train them in order to deliver safe, equitable care for all patients. With the average age of a nurse in the United States being 51 and many nurses aiming to retire at age 55, the current workforce is facing an impending shortage in addition to the workforce already being stretched thin in certain areas of the United States (*National Nursing Workforce Study | NCSBN*, 2017).

NGN turnover has a negative impact on the workplace environment and patient outcomes as those two items share a very strong correlation. High rates of turnover affect work group cohesion leading to communication breakdowns, poor nurse-physician interactions and relationships, and increased rates of falls and medication errors (Bae et al., 2011). Increased

turnover impacts staff that choose to stay in their positions as they face staffing shortages, unsafe patient ratios, and increased workplace stress (Bae et al., 2011).

The population that this project will focus on directly will be new graduate nurses. However, should this project prove successful, the concepts, tool, and policy could be applied to various other positions within the healthcare organization.

Problem Scope

Within the healthcare organization, as previously discussed, the financial costs of leaving this problem unattended are staggering. Not only is this problem financially detrimental, but it leaves the healthcare organization vulnerable to outside competition. In an area that is healthcare industry heavy, having high rates of turnover compared to neighboring healthcare organizations poses an external threat that must be addressed to avoid the loss of talented employees to outside competition (R. Kazik & J. Ohman, personal communication, January 22, 2021).

High turnover rates have impacts that reach beyond the hospital. The social concerns that are raised in relation to this problem carry significant weight. As the Baby Boomer generation continues to age, they will pose a more significant burden on an already overburdened healthcare system which may in turn force families to tend to loved ones at home rather than in healthcare facilities where the health problems may be adequately managed. For those able to receive care in a hospital, high rates of turnover are known to be associated with poor patient outcomes like increased falls and medication errors (Bae et al., 2011).

Problem Consequences

The financial consequences of this problem are dire at best for the healthcare organization. Conservative estimates place the cost of replacing a nurse, whether they are a new

graduate or seasoned, at $38,000 to $61,000 with some studies and estimates placing the cost in the $90,000 range (*2018 Press Ganey Nursing Special Report*, 2018). These figures factor in several variables when calculating the cost of turnover and they include: hiring and training a replacement nurse (which includes preceptor pay and non-productive time associated with didactic learning), hiring recruitment firms to fill gap needs, paying locum nurses and the agencies that employ them, hiring in-house recruiters, and paying overtime. Nursing Solutions Incorporated (NSI), a national nurse recruitment and retention firm, found in their 2020 report that the average time to fill an RN vacancy is 85 days – even longer for specialized units (*2020 NSI National Health Care Retention & RN Staffing Report*, 2020).

In addition to the outright cost, NGN turnover directly impacts each individual nursing unit. Consistently turning over NGNs produces workforce shortages, negatively affects workgroup cohesion, can increase the length of stay (a frequent measure of both patient outcomes and satisfaction) and can increase the rates of patient falls and medication errors. All of these factors work in tandem to affect patient outcomes and patient satisfaction (Bae et al., 2011).

NGN turnover also has a detrimental impact on patient morbidity and mortality. A growing body of evidence supports this fact. NGN turnover forces an undesirable skill mix onto inpatient units which may lead to an imbalance in nursing skills across the unit. This lack of skill, years of experience, and possible strain on nurse-to-patient ratios negatively affect morbidity and mortality among all inpatient units (O’Brien et al., 2006).

Turnover hurts workgroup cohesion as long-term relationships between staff are unable to develop. Those nurses who elect to stay on units with high turnover may feel abandoned and question their motives to stay. This self-doubt directly impacts self-efficacy and, in turn, can

manifest in poor execution of job-related responsibilities leading to poor outcomes and poor patient satisfaction (Bae et al, 2011). In a healthcare environment where federal reimbursement is based largely on patient satisfaction scores, the effects of NGN turnover on workgroup cohesion can be financially devastating.

Poor workgroup cohesion may also have a detrimental effect on patient participation in follow-up care as well. One study examining the care of First Nations peoples in Ontario, Canada found that poor workgroup cohesion negatively affected the continuity of care, which in turn had a detrimental impact on further treatment decisions and follow-up care (Minore et al., 2005).

Per the Centers for Disease Control and Prevention, nurses are among a group of occupations at high-risk for musculoskeletal disorders (Centers for Disease Control and Prevention [CDC MSK], 2021). These disorders are more frequent among units with higher rates of turnover due to the increased physical workload experienced by the workers who remain who must literally carry the weight due to staffing shortages experienced (Centers for Disease Control and Prevention [CDC MSK], 2021).

Literature Synthesis

While literature points to many different ways of solving the problem of new graduate turnover, one thing is obvious: in order to combat the problem(s) present, one must first understand the driving cause(s) of turnover. There is no tried and true method of solving the problem of new graduate turnover, and therefore, healthcare organizations must look internally at organizational challenges individually. The CoVID-19 pandemic has and likely will continue to illustrate just how valuable nurses are in the healthcare setting and taking steps to retain talent is

vitally important to the survival and financial viability of healthcare organizations. At present, there is no way of capturing vital information from new graduate nurses who are voluntarily leaving their positions within the first 12 months of hire. Without this information, the healthcare organization in question has no way of knowing and understanding the driving factors behind NGN turnover, and therefore, minimal hope of changing or fixing these causes.

Understanding the root cause(s) of turnover is only one key takeaway from the literature. Another key finding from a literature review performed in 2017 showed that NGN residency programs, including the recently adopted Vizient New Graduate Residency Program (formerly known as the UHC/AACN Program) dramatically increase the rates of NGN retention and job satisfaction (Van Camp & Chappy, 2017). While this is an important piece of information, HCOs should not fall into the trap of believing that an NGN Residency Program will eliminate the root cause(s) of turnover.

A survey conducted in 2020 (*N=502*) and published in *Nursing Administration Quarterly* gathered data from members of the American Organization for Nursing Leadership to assess their perceptions of the efficacy of residency programs for NGNs. The results showed that the majority of survey respondents believed that residency programs were beneficial to their organization but did not feel they had the evidence to support that claim (Trepanier et al., 2020). In response to that perceived lack of evidence, nursing leadership may be prone to view residency programs as an organizational cost rather than a long-term investment. Smaller facilities and critical access hospitals that lack the resources are more prone to these feelings as they lack the funding and the staff to implement an NGN residency program (Trepanier et al., 2020).

In contrast to the commonly held belief that there is a lack of evidence of the efficacy of NGN residency programs, a 2012 study published in the journal *Nursing Economic$* showed that quite the opposite is true. 15 hospitals, owned by the same organization, put an NGN program into practice. The data collected showed three very important points. First, 14 of the 15 hospitals showed a decrease in the rate of turnover, representing significant financial savings (Trepanier et al., 2012) Second, no facility lost money during the residency program implementation period. Third, the reduced turnover associated cost-savings per hospital averaged out to $15 million (Trepanier et al., 2012). The savings are variable depending on the geographical region and the need for crisis contracts or locum staff to fill vacancies but the fact remains that evidence backs the efficacy of residency programs.

To further lend credence to the notion that residency programs are effective, a 2017 literature review by C. Cochran in the journal of *MedSurg Nursing*, evaluated 22 peer-reviewed articles to assess the efficacy of residency programs nationwide (Cochran, 2017). Cochran found overwhelming evidence that residency programs are a cost-effective method that are proven to reduce new nurse turnover rates amongst new graduates. The most effective programs last for 12 months and contain an educational and mentorship component to the NRP, like the Vizient program that was newly adopted by the target HCO (Cochran, 2017).

In an entry published in a 2010 *Journal of Nursing Management*, Tourangeau et al. published a study that gave additional weight to the need to identify the root cause(s) of NGN turnover (Tourangeau et al., 2010). With a sample size of 675 nurses, it was found that promoting work group cohesion, enhancing organizational support structures, and working to improve job

satisfaction showed promising results in decreasing turnover intent and turnover rates (Tourangeau et al., 2011).

Gap Analysis

Literature points to Transition to Practice programs, like the models developed by the National Council of State Boards of Nursing and Vizient, as a tried and true method to retain new graduates and combat high rates of turnover (Spector & Echternacht, 2010). However, the target healthcare organization recently adopted a nationally recognized and highly-rated new graduate transition to practice program. This leads one to believe that there are other issues in play driving the high rates of turnover (R. Kazik & J. Ohman, personal communication, January 22, 2021). A root cause analysis is needed to begin to understand the driving factors behind these high rates of turnover. A data collection tool will afford the healthcare organization the means by which to do this.

Additionally, the literature and the evidence contained within highlight the need to pinpoint the exact factor(s) that drive turnover in an organization. As it currently stands, there is no method of obtaining information relative to that point. This can and will lead to any attempts to modify or rectify factors that drive turnover to be poorly directed, a shot in the dark, with only hearsay and whispers to act as guidance instead of solid feedback. Furthermore, any attempts made without clear direction run the risk of being costly without seeing any actual results. One may think that workplace violence is a key, driving factor for turnover when in actuality, safe-staffing ratios and scheduling challenges are what drive nurses to leave. Any attempts at rectifying workplace violence, while not inherently wrong, will not solve a problem.

Proposed Solution

The proposed solution to this problem is the development and implementation of a policy that allows for anonymous, deidentified information in the form of a standardized exit questionnaire from voluntarily exiting new graduate nurses and the tool that enables that data collection. After this tool has collected data for any given amount of time deemed appropriate by the organization to ensure anonymity, the data may be analyzed to see if common problematic themes begin to emerge like workplace violence, loss of autonomy, or lack of organizational support.

Once themes have been identified, leadership within the healthcare organization is given objectives they may work towards rectifying, whether those objectives are workplace violence, the desire to self-schedule, or wages. While the loss of some employees may be unpreventable due to life circumstances like disability or a move across the country, other items like workplace violence are actionable. Again, once themes are identified, healthcare leadership may act on them in any number of ways including task forces to better understand and combat the problem or by simply letting more data be compiled to have a stronger, more robust data set.

Project Setting, Sponsor, Stakeholders, and Participants

The project setting is a large healthcare system in northern Minnesota that serves the northeastern portion of Minnesota, all the way north to Canada, northwestern Wisconsin, and parts of Michigan's Upper Peninsula. This healthcare system is the largest north of the Minneapolis/St. Paul Twin Cities metropolitan area (Kazik & J. Ohman, personal communication, January 22, 2021).

There are many stakeholders associated with this project with one of the primary stakeholders in this project would be the target healthcare organization. As they currently face

significant financial losses from high rates of NGN turnover, resolving this issue is a priority. The Chief Financial Officer and the finance department should have a vested interest in determining the driving factors behind NGN turnover and seeing them resolved. Other stakeholders include those involved in recruitment and human resources as the burden of constantly filling vacancies is not only time-consuming but expensive as well. Healthcare organizational leadership will play a role in the formation of both the policy and the tool proposed by this project as their feedback will be needed to ensure that all areas of concern are addressed and both products align with the HCOs overall goals related to the reduction of NGN turnover.

The target healthcare organization is beginning a push toward Magnet® status and this high turnover rate needs to be addressed as having a low turnover rate and high employee satisfaction are benchmarks for the Magnet® program (R. Kazik & J. Ohman, personal communication, January 22, 2021). Furthermore, those benchmarks are marketable strengths for the organization that can be used to recruit and retain more skilled staff.

Healthcare consumers also hold a stake in this issue. As high turnover rates among NGNs are associated with poor outcomes and poor satisfaction, consumers are directly impacted by this issue (Bae et al., 2011).

Finally, the registered nurses, particularly new graduate nurses, are stakeholders in this project. With turnover rates close to 40%, new graduates are faced with a daunting challenge to make a successful transition to practice and stay in their positions longer than 12 months. Addressing the barriers to success will help the healthcare organization retain their new graduate

nurses and continue to educate them and strengthen their clinical skills in the face of impending nursing shortages across the country.

NGNs are the primary participants in this quality improvement project. Their anonymous, de-identified feedback will be what guides decision-making and quality improvement initiatives related to high rates of NGN turnover in the future. If the pilot of this policy and tool are successful, they may be expanded to use with all hospital employees, regardless of whether or not they are nurses, in an ongoing effort to rectify issues that may be causing high rates of turnover among all employee bases.

This QI project is sponsored by the Chief Nursing Officer and the Director of Medical/Surgical Nursing.

Organizational Needs Assessment/SWOT Analysis

SWOT analysis and internal analysis of the healthcare organization show several factors which serve to justify the need for this project. There are many organizational strengths to be appreciated like being one of the largest employers in the geographical region, being situated near several undergraduate nursing programs, and building and moving into a state-of-the-art facility. Recently, the target organization has started offering signing bonuses to new graduate nurses, sometimes as much as $20,000 for a two-year commitment (E. Alaspa, personal communication, June 8, 2022).

Several areas of identified weakness necessitate the need to track information from voluntarily terminated NGNs. For example, pre-pandemic turnover rates were two-three times higher than the national average. The main city that the target organization is located in is a medical industry-heavy city, with another major local hospital as competition, in addition to

long-term care facilities, home care organizations, and private nursing options. The nearby job market in the Twin Cities Metropolitan area may offer higher wages and more control over scheduling to new graduate nurses which may result in even higher turnover rates. Locum and crisis nursing contracts, as highlighted by the CoVID-19 pandemic, offer incredibly lucrative contracts over a short length of time - some as high as $90,000 over a 6-week span - further draw NGNs away from regular employment and stable work environments (A. Evans, personal communication, December 22, 2021).

In terms of opportunities for the healthcare organization, addressing areas of weakness is a marketable strength of the organization. Successfully recognizing and addressing areas of weakness makes the healthcare organization appear proactive and invested in employee satisfaction and wellness which can lead to local and regional appeal for the facility. This appeal may serve to pull in more talented RNs and develop a more robust workforce that can be relied upon in difficult times. Additionally, the HCO in question recently began a quest to achieve Magnet® designation by the American Nurses Credentialing Center (R. Kazik & J. Ohman, personal communication, January 22, 2021). Successfully attaining the Magnet® designation is a very powerful and meaningful marketable strength for the organization as it represents the highest standards in terms of quality of care, patient satisfaction, and employee satisfaction.

Failure to address these areas may allow increased opportunities for other healthcare organizations in the same local or regional geographical area to start to bolster their presence and draw more talent from the organization. This in turn may exacerbate pre-existing issues and cost the HCO even more money on an annual basis. See Appendix B for a visual representation.

Theory Overview

This QI project will be guided by Neuman's System Model. In order for individuals or large organizations (like a healthcare system) to function properly, all the smaller systems must be functioning properly. One may think of a healthcare organization as a living organism; unless all parts of the organism are performing their role, the organism will perish. Neuman's model focuses on three types of prevention: primary, secondary, and tertiary. Primary prevention will focus on employee wellness promotion – or, what can be done to improve job satisfaction? Secondary prevention will work towards strengthening employee resistance to new stressors as they arise – or improving resiliency in the workforce towards new challenges. Tertiary prevention focuses on maintaining the well-being of the workforce by supporting organizational strengths (Zaccagnini & Pechacek, 2021).

In addition, Kurt Lewin's Theory of Planned Change will be utilized in this QI project. Lewin, who was a social psychologist at the turn of the 19th century, postulated that if someone, or in this case, a healthcare organization, could identify and establish the potency of driving factors and forces behind any decision, then it would be possible to understand why individuals, groups, and organizations act as they do (Shirey, 2013). Furthermore, if the influencing factors could be identified, one may act on them to either strengthen or diminish their impact. This theory is put into action in the healthcare setting in three phases, the first of which is deemed *unfreezing*. In this stage, a problem must be identified. This may come from any individual in the HCO, and in this case, the project sponsor. This stage begins with leadership conducting a gap analysis and creating a sense of urgency and need for change (Shirey, 2013).

Moving/transitioning is the second stage of Lewin's theory and in this second step. change should be viewed as a process rather than a one-and-done event. Instituting small

change(s) over the course of years may take an equal amount of time to produce results (Shirey, 2013). Regardless, change has happened and must be appreciated, whether the outcome is positive or negative. This stage also involves a significant amount of coaching and communication as change is oftentimes associated with fear and uncertainty as it challenges the way things have always been; long-standing policies and procedures are subject to revision, and participants are prone to losing sight of the end goal (Shirey, 2013).

The third and final stage of Lewin's Theory of Planned Change is *refreezing*, in which positive changes that have been implemented are stabilized so they have time to embed into existing systems like the HCO culture, policies and procedures, and Human Resources formulas (Shirey, 2013). Locking in, or *refreezing*, change(s) is a critical step to the long-term sustainability of said implemented change(s).

Literature Search Process

The goal of the literature search was two-fold. The first goal was to understand the many causes of new graduate nurse turnover and the depth at which it is felt across the United States. The second goal was to ascertain the best-practice solutions to combating NGN turnover. The search was conducted simultaneously.

In order to fully understand the wide scope of effects of high rates of new graduate turnover, a literature search was performed. Areas examined include the impacts that turnover has on patient care, hospital economics, and hospital culture. Search terms utilized included: new graduate nurse(s) AND turnover; new graduate nurse(s) AND retention OR intent to stay; new graduate nurse(s) AND residency programs; new graduate nurse residency programs AND intent to stay; new graduate nurse(s) AND transformational leadership AND intent to stay; new

graduate nurse(s) AND causes of turnover; new graduate nurse(s) AND turnover AND economic impact; new graduate nurse(s) turnover AND patient outcomes; new graduate nurse turnover AND theoretical framework; new graduate nurse AND preceptor; new graduate nurse residency program; new graduate nurse(s) turnover and workplace environment; nurse residency programs AND cost OR expense; and nurse residency program AND history. Additional searches related to effective nurse residency programs yielded the Vizient/American Association of College of Nursing (Vizient/AACN) program. The total number of resources found after these searches were 17,448. These sources were then filtered based on inclusion and exclusion criteria. More data were collected about workforce numbers, trends in employment information, and healthcare costs in the United States. Special attention was given to articles and studies with higher levels of evidence. Surveys of current workforce nurses and NGNs from Press Ganey and the 2017 National Database of Nursing Quality Measures (NDNQI) survey were also sought out to gain their perspectives on the determinants of turnover.

Resources were excluded if they were not published in the previous 5-10 years. While most resources fall within the target date range, some seminal studies lie outside that range but were included in the literature review. Only full-text articles were utilized. All resources have come from peer-reviewed journals aside from USBLS Data, Press Ganey surveys, NDNQI data, and NSI data. There is no shortage of literature about nurse turnover in the aforementioned databases, but special attention was paid specifically to NGN turnover. The majority of sources are from the United States and Canada, but several from other foreign, English-speaking countries were included for a global perspective and solutions related to the issue of NGN turnover.

Aims/Goals/Objectives Clarified

This health program will have three main goals. The first is to develop a policy that allows for the collection of data from exiting employees within the healthcare organization system. The second goal is the development of a tool to collect the aforementioned data, whether it be by an anonymous survey, an exit interview, a phone survey, or a retrospective survey. The final goal is to put both the policy and the tool through multiple steps of evaluation by key stakeholders to ensure all relevant points of data are collected and the policy matches the needs of the organization.

Goal 1: Formulate a data collection policy.

Objective 1

Formulate a policy-based survey through data gathered from the literature and through other healthcare organizations for the purpose of collecting exit information from new graduate nurses who voluntarily terminate by December 1, 2021.

Implementation

The policy will be developed with the six AGREE II tool domains in mind. The first domain states that the objective of the guideline or policy is specifically described, the clinical question is specifically described, and the population to whom the policy is meant to apply is specifically described (Brouwers et al., 2010). The second domain addresses stakeholder involvement and ensures the policy development includes individuals from all relevant professional groups, the target population preferences have been considered, and the target users of the policy are specifically defined (Brouwers et al., 2010).

The third domain relates to the rigor of development and requires systematic methods to be used to search for evidence, criteria for selecting evidence are clearly described, and that the methods for formulating recommendations, the benefits, side effects, and risks are clearly defined. There needs to be a link between recommendations and the supporting evidence, and the policy needs to be reviewed by external experts (Brouwers et al., 2010).

Domain four relates to clarity of presentation and requires that recommendations are specific and unambiguous and that recommendations are easily identifiable (Brouwers et al., 2010). Domain five addresses applicability and states the policy must provide advice on how the recommendations are put into practice and describes facilitators and barriers to a successful application. Potential costs need to be considered (Brouwers et al., 2010). The sixth and final domain is editorial independence which requires that the funding body does not have sway over the content of the policy and that competing interests of the policy development group have been addressed (Brouwers et al., 2010).

Policy development should begin as quickly as possible after the project has been approved by the Institutional Review Board (IRB) and a first draft of the policy should be completed and ready for initial review within a 6-week time frame (see Appendix A for timeline). The policy will go through several rounds of review in order to incorporate stakeholder feedback to yield a succinct, clearly worded policy.

Outcome Measure and Evaluation

Success of this objective will be a nominal measure: whether or not the first draft of the policy is completed within the prescribed time frame and sent for review.

Goal 2: Formulate a tool to use for data collection.

Objective 2

Develop a tool to collect data from exiting employees to determine the causes of nurse turnover. Exit interviews from other healthcare organizations will be collected and analyzed to attain the best possible language. Exit interviews will be collected from a minimum of five other organizations. This goal will be completed within six weeks of IRB approval.

Implementation

In order to develop a meaningful tool, the first step in this objective is to identify key stakeholders and collect their input related to what they feel are important ideas or aspects the tool should address. Stakeholders may include nursing leadership like the Chief Nursing Officer (CNO) and unit-specific managers, Human Resources (HR), Chief Financial Officer (CFO) or leaders within the finance department, and nursing leaders that aren't in traditional middle management or leadership positions like charge nurses, union representatives, or long-tenured employees. Nurses from diverse backgrounds, like members of a racial minority or the LGBTQ+ community, should also be given a voice so that their unique perspective is represented.

Once these key figures have been identified, a meeting can be held or a questionnaire can be sent out asking for their input on what areas (i.e. workplace environment, scheduling challenges, etc.) they would like addressed in the development of the data collection tool/survey/interview. A continual narrative feedback cycle will be needed to ensure all areas are addressed.

Cowden and Cummings's model of nurse intent to stay will also guide tool development. Questions or areas included will address all facets of this model: managerial characteristics, organizational characteristics, work characteristics, nurse characteristics, and nurse cognitive and

affective responses to the work they are doing. Additional questions to be included from other, pre-existing exit surveys will also be included. Examples of other questions include: why the employee would recommend or not recommend the healthcare organization as an employer; what would need to change in order for the employee to stay in the employ of the healthcare organization; what makes a new position with a different organization more appealing than staying with healthcare organization; and what few things could management and leadership do to improve the general work environment and working morale? These questions lend themselves to narrative feedback and therefore prove particularly useful in modifying the tool for future iterations.

Questions will be posed in a way that they can be answered via a Likert Scale. Having solid, quantifiable data will allow managers and leadership to view areas of strength and weakness as scores and eliminates some of the subjectivity of written answers. However, written answers are helpful in order to allow employees a chance to express their thoughts in a way that Likert-style questions cannot. As previously stated, written answers allow for common themes or concerns to emerge and allow the employer a chance to act on them in the future.

Anonymity will be of the utmost importance for data collection as employees may not be completely honest for fear of retribution. As such, if phone or mail surveys are the chosen tool, having a third party collect and report data will be necessary to maintain confidentiality and anonymity.

Exit interviews will be obtained from other healthcare organizations around the state and from other industries. Having a blueprint for a successful interview tool will aid in tool creation and will help to make the tool more effective when it is put into use.

This tool will be developed in tandem with the aforementioned policy; a 6-week time frame after IRB approval for tool development is the desired goal. Input from stakeholders may push the timeline back further than desired.

Outcome Measure and Evaluation

As with the first goal, a nominal measure will be used to determine the successful completion of this objective.

Goal 3: Ensure readiness of both the tool and policy and deliver them both to the target HCO within one week of project implementation.

Objective 3

The policy and the tool both will be approved for implementation within two weeks after they have been completed and submitted for feedback by stakeholders.

Implementation

Once drafts of both the tool and the policy have been created, they will need to undergo a process of revision so that the policy and the tool itself are both clearly defined. This process will require two iterations in order that all stakeholders be given the chance to give their opinions. In between these periods of feedback, the language of the policy can be reworked, and questions of the tool can be fine-tuned so that both are clear and understandable.

The policy will be sent out as a draft to all stakeholders with narrative feedback forms where reviewers may make notes of any revisions they would like to see. The tool can be sent out for revision in whatever form it takes. Narrative feedback forms would be included with the survey so stakeholders may offer suggestions for revision. The drafts will also be sent to a prospective sample population to ensure they feel their concerns would be addressed in an exit

survey. The narrative feedback form allows for the creation of an ongoing PDSA cycle and continuous amendment on an as-needed basis.

Outcome Measure and Evaluation

In order for this objective to be completed successfully, both the tool and the policy will need to go through the feedback and revision portion until all parties/stakeholders involved are satisfied with the language and presentation of both items. Narrative feedback will allow for common themes and concerns to emerge and be addressed. While all parties may not share the same opinion about all points in each tool, coming to a compromise to move the tool forward into practice will be important. As with any quality improvement initiative, a continuous circuit of revision and improvement will need to take place in order to better reach the target demographics.

Gantt Chart

A Gantt chart (see Appendix B) can be utilized as a visual guide to the timeline for the implementation of this project. The policy and the tool will be completed in January of 2022 to give to stakeholders for their review. During the review process, changes to both the policy and the tool can be made before going live within the healthcare organization. This process will happen during February and March of 2022. Once the tool and policy have been through rigorous feedback cycles, they will be ready for implementation within the healthcare organization and will be put into practice in June of 2022. From that point on, results can be analyzed and passed on to the healthcare organization.

Work Plan

Tasks assigned to stakeholders will be limited to the review of the policy and the tool to ensure they meet institutional standards and are designed in such a way that they capture relevant data and are ready to be implemented upon final approval. The tool and the policy will both be developed by the lead for this QI project and given to stakeholders for feedback. See Appendix B for a Gantt chart related to the timeline of this project.

Once the feedback has been gathered and appropriate changes have been made, the tool and the policy will both be given to HCO leadership so that the pair may go live. System-wide, employees will be made aware of the new policy and what it entails. Furthermore, any NGN who voluntarily terminates will be given the electronic version of the survey and data collection and analysis can begin. Given the short time period for data collection, the survey will also be sent to any voluntarily terminated NGN who has left their position or transferred to another unit since January 1, 2022, as long as they still fit the predefined criteria for an NGN set forth in the policy. This retrospective aspect will lead to a larger, more robust data pool to analyze.

Logic Model

A basic logic model will aid in project development. Visual cues give all participants something tangible that they can follow along with that is easy to understand and engaging. The "Inputs" section takes into consideration feedback from all relevant stakeholders in the QI process, including that from Human Resources, HCO leadership and C-Suite executives, unit management and unit leadership (like Unit-Based Practice Counsels), hospital-wide nurse counsels, and new graduate feedback. That feedback will go into shaping both the tool and the policy into well-defined products that may be employed as soon as they are approved by the target organization.

In the short term, the organization can begin to utilize Lewin's Theory of Planned Change (TPC) as they prepare to implement and solidify the policy in an effort to bring about long-lasting, sustainable change. NGNs who experience using the tool either when they leave or transfer to a different unit may share their experiences with friends or former coworkers and help to build knowledge and exposure to the tool. Early feedback from the tool may guide leadership to modify to tool to elicit more specific feedback as they see fit.

In the intermediate and long-term periods, data collection should be well-established, giving the HCO more data that may be acted upon. This is also where the *transitioning* and *refreezing* periods of Lewin's TPC are put into practice as the tool and the policy both transition to more concrete and solidified parts of the exit process. The HCO may also deem it appropriate to expand the definition of the policy so that the language is changed to encompass all voluntarily terminated RNs and not just new graduates. This way, an even larger data pool is captured and more specific interventions can be put into practice.

A visual interpretation of the logic model may be viewed in Appendix C

Budget

Budgetary considerations for this QI project are minimal. Other than the time spent reviewing the policy and the tool proposed, the healthcare organization does not stand to incur any expenses. Should they choose to utilize a third party to collate and report aggregate data, that would be an expense, but such an expense would fall outside the purview of this project.

Methodology & Analysis

Intervention Plans

Anonymity will be key to the successful implementation and data-gathering efforts of this project. As employees may fear retribution from the healthcare organization, their confidentiality is of the utmost importance in order to secure honest responses. Their security may be assured in several ways. The first is that data goes to a third party to be collated. Once a reasonable amount of time has passed, three months, for example, this third party may report de-identified, anonymous data back to the healthcare organization in aggregate form, ensuring that any identifying comments are removed or altered to ensure their anonymity (i.e. removing specific unit designations, names, etc.). Second, and a less expensive way to complete this process, is to have someone within the healthcare organization system complete this process while maintaining all the aforementioned precautions to maintain anonymity and protect exiting employees from retribution.

Once feedback from stakeholders has been taken into consideration, implementation of this QI project should be relatively simple. The policy will need a system-wide announcement that it is going live so that nurses are given the chance to review it and know that they are being held responsible for the information within. The tool can also be put to use and Human Resources and nurse managers can get automatically triggered reminders when employees are nearing their termination dates. Employees will, as part of the exit process, fill out the survey with the knowledge that they are doing so confidentially and anonymously as there are processes in place to protect them and their identity.

The post-implementation phase is a bit of a misnomer for this project as it will likely be an ongoing initiative that the healthcare organization may adjust as they see fit. If the narrative response data that is associated with the tool collected identify areas of weakness that were not

readily identified by the tool, it may be adjusted to gather more specified information. The tool is open to an ongoing Plan, Do, Study, Act cycle.

IRB/Ethical Considerations

This project will adhere to the American Nurses Association Code of Ethics as well as the Health Insurance Portability and Accountability Act (HIPAA) of 1996.

Implementation

Results from Data Collection

Unfortunately, the healthcare organization where the implementation was targeted expressed significant but unspecified concerns related to the project. Therefore, the implementation phase of this project was canceled and no data was collected.

Discussion of Data/Outcomes Interpretation

As no data was collected, there can be no discussion of the results or interpretation of the outcomes of the survey.

Dissemination

There were no results as the implementation of the project was canceled. In lieu of this, a white paper detailing the process and the system failure will be provided to the institution.

Conclusion

Understanding the causes of NGN turnover is of the utmost importance. The future holds many challenges for healthcare in the United States. Spiking retirement and an exacerbated workforce shortage are only going to make things more difficult in terms of delivering safe and effective patient care with positive patient outcomes. NGNs are faced with the reality that they will be treating older and more complex patients than previous generations of nurses. Support for

these NGNs must come in the form of talented preceptors, managerial and organizational support, didactic learning opportunities, and safe, healthy work environments. But first – areas of weakness within the organization must be identified.

As the CoVID-19 pandemic has shown, healthcare suffers when resources are scarce. Nurses are the largest demographic and human resource in healthcare, and a scarcity of this most valuable resource could prove catastrophic for ill-prepared healthcare facilities in the near future. It is imperative to act swiftly and decisively in the face of this looming threat. While daunting, the challenge of NGN turnover is not without solutions. All that is required is a bold first step in recognizing and choosing to address the problem before it is too late.

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Appendix A: Literature Matrix

Reference	Purpose/Question	Design	Sample	Intervention	Results	Notes
Beecroft, P. C., Dorey, F., & Wenten, M. (2008). Turnover intention in new graduate nurses: A multivariate analysis. *Journal of Advanced Nursing*, *62*(1), 41–52. https://doi.org/10.1111/j.1365-2648.2007.04570.x	Purpose was to determine the relationship of new nurse turnover intent with individual characteristics, work environment variables and organizational factors. Additional purpose was to compare new nurse turnover with actual turnover in the 18 months of employment following completion of a residency.	Prospective survey design and data were collected over a 7-year period.	Study respondents were new grad nurses who took part in a nurse residency program. N = 889	N/A	Work environment and organizational characteristics contribute to the likelihood of new grad nurse turnover intent. Those displaying increased seeking social support to cope with the transition from student to competent RN is related to turnover intent. When new graduate nurses are satisfied with their jobs and pay and feel committed to the organization, the odds against turnover intent decrease Older new graduate nurses (>30) are 4-5	This is a longitudinal study and presents with data over time. Research takes in to account and considers multiple turnover factors in final model.

					times more likely to have turnover intent if they are not placed in their desired unit.	
Kennedy, A. (2019). Nurse Preceptors and Preceptor Education: Implications for Preceptor Programs, Retention Strategies, and Managerial Support. *MEDSURG Nursing*, *28*(2), 107–113.	Purpose of the article was to examine nurse perceptions of preceptor roles and the efficacy of preceptor education. The author compared nurses who have had preceptor training to those who had not and the effect that had on new nurse retention.	The author utilized a questionnaire with 30 items. Questions addressed perceptions of the benefits and rewards of preceptor training, perceptions of commitment to the preceptor role	All participants were members of the Academy of Medical-Surgical Nurses. N = 88	N/A	Nurses with on-going preceptor training showed they felt more prepared for their role as a preceptor and therefore felt it had a positive implication for new nurses they were training.	Study limited to on AMSN nurses with a small sample size. The data is useful but likely not statistically significant.
2018 Press Ganey nursing special report: optimizing the nursing workforce: key drivers of intent to stay for newly licensed and experienced nurses [Report]. (2018). Press Ganey. https://www.pressganey.com/resources/white-papers/2018-nursing-special-report	This study was designed to identify trends in RNs intent to stay based on age, tenure, unit. Additionally, the study assessed key drivers of intent to stay.	This study analyzed the responses of the 2017 NDNQI RN Survey. Specifically, research looked at trends and differences by age, tenure, and unit type, predictors of intent to stay, predictors of unit-based rates of intention to stay, and differences in predictors of intent to stay for both newly licensed	N = 253,738 nurses across the United States. Age Categories: <30, 30-39, 40-49, 50-64, 65+ Tenure Categories (in years): <2, 2-4, 5-9, 10-19, 20+ Units represented include:	N/A	The results showed that 15 items across 5 major domains exist that predict intent to stay. Manager Characteristics: Nurse manager support, praise and recognition, CNO leadership, and shared decision making. Organizational Characteristics: Career development,	Addresses expected shortcomings of RN staffing in the future. The report has US Bureau of Labor Statistics data to support.

		RNs and experienced RNs.	adult critical care, adult step down, adult med-surg, obstetrics, neonatal, pediatrics, psychiatric, perioperative, rehab, ED, ambulatory, and other.		influence over schedule, staff. Work Characteristics: RN-RN consults, work group cohesion. and abuse/incivility. Cognitive response to work: quality of care, missed care, empowerment Affective response to work: job satisfaction and joy at work.	
Twigg, D., & McCullough, K. (2014). Nurse retention: A review of strategies to create and enhance positive practice environments in clinical settings. *International Journal of Nursing Studies*, *51*(1), 85–92. https://doi.org/10.1016/j.ijnurstu.2013.05.015	The article summarizes and critically reviews strategies identified in the literature which support retention of nurses. Sources reviewed were retrieved from CinahlPlus, Medline, and Proquest.	Resources were found via searching said databases using keywords: nurse, practice, environment, retention strategies Non-English articles were excluded.	39 articles and papers reviewed in this literature review.	N/A	The articles assessed had several key takeaway points. Nurse participation in hospital affairs: empowering nurses to influence work environment can help to improve quality of care and job satisfaction.	No interventions implemented. Rather, the authors evaluated and collated data from articles that performed studies. Individual articles that were reviewed will

					Encouraging meaningful, effective care: giving nurses the flexibility to make decisions in an environment of trust and respect can help improve retention rates. Nurse manager ability: mangers should aim to visible, accessible, and responsible to their staff. Specific desired qualities: expert clinical skills, patient focus, vision, stamina, innovation, dynamism, confidence, selflessness, and collaboration. Staffing and resource adequacy. Collaborative nurse-physician relationships.	be added to the evidence table as appropriate.

2020 NSI national health care retention & RN staffing report [Report]. (2020). NSI Nursing Solutions. https://www.nsinursingsolutions.com/documents/ Library/NSI_National_Health_Care_Retention_ Report.pdf	This survey, conducted by NSI, a national expert on recruiting and retaining nursing staff, was conducted to examine healthcare turnover, retention initiatives, vacancy rates, recruitment metrics, and staffing strategies.	A survey was sent (to gather the aforementioned info) to over 3,000 hospitals in the US. 164 facilities participated in the survey. The facilities were spread out over 42 states. A standardized definition of turnover was created during data collection and analysis post survey to aid in data interpretation.	164 facilities in 42 states which accounts for an N of 108,047 nurses.	N/A	The top three reasons identified for voluntary termination were personal reasons (family, marriage, disability), career advancement, and relocation. 90.9% of terminations were voluntary. Other reasons for turnover included: retirement, salary, immediate manager, workload and staffing concerns, culture, and scheduling. For 2019, the national average for hospital bedside nurse turnover was 15.9% (range 4.5-43.9%) Areas with highest turnover	The study also addresses hospital vacancy rates, and workforce projections for the near future. 58% percent of hospitals anticipate an increase in their labor force and 59% project to increase their RN workforce. While they plan on increasing staffing numbers, only 29.7% of hospitals anticipate increasing recruitment budget and 11.8% plan to increase recruitment staff.

					include: behavioral health, stepdown or intermediate care, and emergency. Areas with the lowest rates were: pediatrics, burn care, and women's health.	To address vacancy, hospitals frequently use travel RNs. Eliminating travel RN needs can be a significant money saver. For every 20 travel RNs eliminated, the hospital saves roughly 1.4 million dollars (~70k per nurse)
AACN standards for establishing and sustaining healthy work environments: A journey to excellence, 2nd edition [PDF]. (2016). aacn.org. https://www.aacn.org/WD/HWE/DOCS/HWEStandards.pdf	The first edition of this work by the AACN was published in 2005 in response to evidence showing that unhealthy work environments contribute to medical errors, ineffective delivery of care, conflict and workplace stress, and turnover. Through their research and literature reviews, the AACN sought to address six key elements of a	Literature review	N/A	N/A	The six key elements for the seminal AACN work were: skilled communication, true collaboration, effective decision making, appropriate staffing, meaningful recognition, and authentic leadership. In this second addition, the AACN provided	Resources referenced in this article will be utilized to emphasize the importance of a healthy work environment as it pertains to NGN turnover.

	healthy work environment.				dozens of studies as supportive evidence that those six elements of a healthy work environment are still relevant and show they increase quality of care, patient safety, and decrease staff turnover.	
Brook, J., Aitken, L., Webb, R., MacLaren, J., & Salmon, D. (2019). Characteristics of successful interventions to reduce turnover and increase retention of early career nurses: A systematic review. *International Journal of Nursing Studies*, *91*, 47–59. https://doi.org/10.1016/j.ijnurstu.2018.11.003	The purpose of this review was to evaluate characteristics of successful interventions that promote retention and reduce turnover of new graduate nurses.	Systematic review	Of the 11,656 papers that were identified, 53 eligible after inclusion and exclusion criteria were applied.	Internships or residency programs and orientation/ transition programs were evaluated with both of these interventions lasting between 26-52 weeks. Both programs included a teaching component (preceptor and mentor).	The aforementioned programs do indeed decrease turnover among new grad nurses, to varying extents. More research is needed to effectively unpack which methods are most effective and how certain variables may impact the results (not necessarily related to the actual intervention i.e. cost/wage gap, geography, etc.)/	Links to all 53 studies included for future reference.

Cochran, C. (2017). Effectiveness and best practice of nurse residency programs: A literature review. *Medsurg Nursing*, *26*(1), 53–57, 63.	Cochran sought to determine the efficacy of nurse residency programs (NRPs) in reducing new grad nurse turnover and identify best practices in supporting new grad nurses during the transition to practice in acute care settings IF NRP is effective.	Literature review	22 peer reviewed journal articles were included in this literature review. Keyword search included: new graduate nurse, transition to practice, residency program, newly licensed nurse	N/A	NRPs are a cost-effective method that has been proven to reduce new nurse turnover rates amongst new graduates. The most effective programs last for 12 months and contain an educational and mentorship component to the NRP	Resources utilized in this literature review will also be used to support efficacy of NRPs and will be included in this literature review.
Wei, H., Sewell, K. A., Woody, G., & Rose, M. (2018). The state of the science of nurse work environments in the united states: A systematic review. *International Journal of Nursing Sciences*, *5*(3), 287–300. https://doi.org/10.1016/j.ijnss.2018.04.010	The purpose of the literature review was to identify, evaluate, and summarize the major foci of nurse work environments in the US published between 2005 and 2017. Additionally, this review provides strategies to improve nurse work environments.	Literature review. Databases utilized included: MEDLINE, CINAHL, PsycINFO, Cochrane Library, Nursing and Allied Health. Data were analyzed based on Miles, Huberman, and Saldana's constant comparative method to	Of the 54 articles reviewed, 12 articles addressed intent to leave, turnover, and burnout.	N/A	There were five major themes from the review: Impacts of healthy work environment on nurses' outcomes (psychological health, emotional strain, job satisfaction, retention), associations between healthy work environments and nurse interpersonal relationships at	Articles referenced in this literature will be subsequently added to support the importance of a healthy work environment as it relates to NGN turnover.

		compare findings across studies.			the workplace, job performance, and productivity, and effects of healthy work environment on patient care quality.	
Fox, K. C. (2010). Mentor program boosts new nurses' satisfaction and lowers turnover rate. *The Journal of Continuing Education in Nursing*, *41*(7), 311–316. https://doi.org/10.3928/00220124-20100401-04	This study was conducted at St. Francis Hospital and Health Centers in an effort to reduce the turnover of new graduate nurses (31%).	Cohort study: 12 new graduate RNs were paired with 12 experienced nurse mentors for a one calendar year period.	N = 12 The mentor and protégé had to work a minimum of part-time, have no extended medical leave of absence, no shift work similarities, and managers were asked to assess personality compatibility.	Mentor and proteges were paired via their manager. Interventions throughout the one-year program included attending classes and educational events together, were required to complete evaluations every other month for the duration of the study, and were given opportunities to bond outside of the work environment.	After the original cohort completed their trial, retention was at 100%. The study was repeated with a larger sample group. Over the course of three years and three iterations of the mentorship program, new grad attrition rates decreased from 32% to 10.3% The cost of running this mentorship program annually after successful establishment: Expense - $291,00 Savings - $1,040,153	References contain helpful further resources. Study data is from 2006-2008. What do current attrition metrics show about the efficacy of the mentorship program in its current state?

Eckerson, C. M. (2018). The impact of nurse residency programs in the united states on improving retention and satisfaction of new nurse hires: An evidence-based literature review. *Nurse Education Today*, *71*, 84–90. https://doi.org/10.1016/j.nedt.2018.09.003	In newly hired BSN RNs, how does a one-year nurse residency program compare to a traditional orientation in terms of turnover rates and reported job satisfaction (a key predictor of turnover)?	A literature review was conducted to find articles for analysis. Search terms: nurse residency program (NRP), baccalaureate nurse, new nurse, traditional orientation, transition, retention, turn-over, satisfaction. Articles needed to be fairly recent (2012-2017). Exclusion criteria: non-English, non-peer reviewed, addressed NRP without mention of satisfaction or turnover	299 articles originally selected. After filtering through the inclusion and exclusion criteria, 12 peer reviewed journal articles were analyzed.	N/A	NRPs are significantly more effective in helping organizations maintain their newly hired staff than traditional orientations are. While overall satisfaction rates did dip after 6 months of employment, they remained steady and were high based on the McCloskey Mueller Satisfaction Scale. Based on the literature, there is a strong correlation between the use of NRPs and increased retention of new graduate nurses. NRPs are cost effective when compared the potential loss of	Fairly recent information. Discusses the implications for practice as well. Links to extra resources detailing effective NRPs.

					revenue due to turnover.	
Cowden, T. L., & Cummings, G. G. (2012). Nursing theory and concept development: A theoretical model of clinical nurses' intentions to stay in their current positions. *Journal of Advanced Nursing*, *68*(7), 1646–1657. https://doi.org/10.1111/j.1365-2648.2011.05927.x	The purpose was to refine and describe a theoretical model of nurse's intent to stay/turnover.	A literature review was conducted using two electronic databases. Search terms used: turnover intent, intent to leave, anticipated turnover, desire to work, desire to quit, behavioral intention.	Two electronic databases (unnamed).	N/A	The authors developed a theoretical model to nurses' intent to stay (ITS). If corroborated by statistically significant studies, this model can be utilized as a map to promote leadership practices supportive of ITS.	Theoretical model will prove invaluable in assessing data from project.
Maxwell, K. L. (2011). The implementation of the uhc/aacn new graduate nurse residency program in a community hospital. *Nursing Clinics of North America*, *46*(1), 27–33. https://doi.org/10.1016/j.cnur.2010.10.013	This study was conducted at St. Joseph's Hospital of Atlanta to study the impact of implementing the UHC/AACN model on NGN turnover at a Magnet Status Hospital.	Longitudinal study from years 2007 to 2010.	N = 44	Implementation of the year-long UHC/AACN model for new graduate residency programs.	Before implementation, the hospital experienced a turnover rate of 40%. After implementation, the turnover rate dropped to 14%. This shows, at least on a small scale, the UHC/AACN model is effective in reducing turnover.	Research is limited by small sample size, possible participant bias when answering job satisfaction questions (although bias would not impact overall outcome of reducing turnover).
Spence Laschinger, H. K. (2003). Workplace empowerment and magnet hospital	The purpose of this study was to test a	Surveys were conducted with	N = 486	N/A	Results from the two bedside RN	There was not 100% buy

characteristics. *Journal of Nursing Administration*, *33*(7/8), 410–422.	theoretical model that links nurse perceptions of workplace empowerment, job satisfaction, and magnet hospital characteristics in an effort to support nurse empowerment can have a positive impact on intent to stay, patient outcomes, and organization outcomes.	two groups of bedside nurses and one group of nurse practitioners. Only data from the bedside staff is included for the purpose of this paper. Predictive nonexperimental design.			groups surveyed support the hypothesis that work environments that provide support, resources, access to opportunities to grow, are flexible, and empowering have higher rates of job satisfaction and a more positive nursing perception of a healthy workplace.	in from survey participants (not all who received a survey completed). Results can be used by hospital leadership to examine structures that either aid or hinder nurses' access to information, resources, and empowerment opportunities. Open access to all of those things leads to a healthier work environment.
Kramer, M., Schmalenberg, C., Maguire, P., Brewer, B. B., Burke, R., Chmielewski, L., Cox, K., Kishner, J., Krugman, M., Meeks-Sjostrom, D., & Waldo, M. (2009a). Walk the talk: Promoting control of nursing practice and a patient-centered culture. *Critical Care Nurse*, *29*(3), 77–93. https://doi.org/10.4037/ccn2009586	The goal of the study was to determine organizational structures and leadership practices that bedside nurses identified as crucial	Surveys and interviews conducted across 8 Magnet status hospitals in the 8 census tract regions of the United States.	244 staff nurses who were nominated by their peers and managers.	N/A	From these interviews it was determined that there are 2 structures and 5 common practices that enable nurses to	

	for a healthy work environment.				feel more of a sense of control and have a healthier perception of the workplace. The structures are a shared governance model and career ladder programs. The 5 common practices are: providing access to power or empowerment, promoting widespread participation in shared governance, using recognition to reinforce participation in shared governance, acknowledging outcomes and accomplishments, and having evidence-based practice teams	
Hogan, P., Moxham, L., & Dwyer, T. (2007). Human resource management strategies for the retention of nurses in acute care settings in hospitals in australia. *Contemporary Nurse*,	The purpose of this article was to determine retention	Literature review	N/A	N/A	Through a review of the literature, the authors	Australia article – the global perspective is

24(2), 189–199. https://doi.org/10.5172/conu.2007.24.2.189	strategies for acute care settings.				determined there are several factors that employers can use to improve retention including reducing job related stress and anxiety, recognition of accomplishments, defining roles and responsibilities, and improving job satisfaction.	helpful and the findings should translate to US issues.
Schmalenberg, C., Kramer, M., King, C. R., Krugman, M., Lund, C., Poduska, D., & Rapp, D. (2005). Excellence through evidence. *JONA: The Journal of Nursing Administration*, *35*(10), 450–458. https://doi.org/10.1097/00005110-200510000-00006	The purpose was to examine the interplay of the physician-nurse relationships and structures that make it possible for these relationships to function in a positive and meaningful way.	Literature review of sources on Medline related to RN MD relationships.	3 evidence sources.	N/A	5 structures identified that impact a positive RN MD relationship (which has a direct, positive outcome on patient outcomes and the perception of the work environment): joint RN MD practice committees, clinical decision-making autonomy, joint practice record reviews,	According to the research, collaboration was viewed as an event and not a relationship. ICU settings tended to have more collaboration than other units do to the complexity of the patient conditions.

					integrated patient record and primary nursing delivery systems.	
Trinkoff, A. M., Storr, C. L., Johantgen, M., Liang, Y., Han, K., & Gurses, A. P. (2011). Linking nursing work environment and patient outcomes. *Journal of Nursing Regulation*, *2*(1), 10–16. https://doi.org/10.1016/s2155-8256(15)30296-9	The authors completed this study to examine the impact of nurse work environment (which entails staffing, job demands, schedule, and practice environment) on patient outcomes.	Secondary analysis of hospital-level patient outcomes and staffing information linked with survey data from nurses.	N = 633	N/A	Nurses perceiving their work environment as “healthier” were generally linked with more positive patient outcomes.	As data was based on survey results and perceptions, the results may not be tremendously objective and are subject to bias. However, patient outcome data is objective.
Tourangeau, A., Cranley, L., Spence Laschinger, H. K., & Pachis, J. (2010). Relationships among leadership practices, work environments, staff communication and outcomes in long-term care. *Journal of Nursing Management*, *18*(8), 1060–1072. https://doi.org/10.1111/j.1365-2834.2010.01125.x	The purpose of this article was to examine the role that relationships in the workplace have on care outcomes (job satisfaction and turnover intent).	Surveys were sent to nurses with questions about work environment, work group relationships, leadership practices, organizational support structures, job satisfaction, and turnover intent.	N = 675	N/A	Promoting job satisfaction and promoting a well- developed, long-term workforce has been found to decrease turnover intent.	As this was a survey, it is prone to bias. This study also focused on long-term care facilities and not acute care.
Goode, C. J., Lynn, M. R., McElroy, D., Bednash, G. D., & Murray, B. (2013). Lessons learned from 10 years of research on a post-baccalaureate nurse residency program. *JONA: The Journal of Nursing Administration*,	The purpose of the study was to look at the results of the UHC/AACN NRP over the course of 10	Data was collected via the Casey-Fink instrument to assess NGNs in areas of skills, stressors, nursing	N = 1016	N/A	The main points gathered from this research: NGN perception of overall confidence and	Given the length of time that this study encompassed, the data is very valuable

43(2), 73–79. https://doi.org/10.1097/nna.0b013e31827f205c	years and to report those findings.	roles and responsibilities, satisfaction, transition to practice, and basic demographic questions.			competence in various nursing skills showed statistically significant increases over the course of the 1-year residency; residents rated their satisfaction very high at the start of the NRP, experienced a dip at the 6-month mark, and then scores stabilized at the conclusion of the NRP; across the 10 years, retention rates improved from 88% to 94.6%; evidence-based practice project completed by the NGN in the final 6 months of the program were highly valued by the organization and had an impact on improving nursing practice; residents rated the program, faculty, goals,	for looking at an NRP as a long-term investment. Retention improved and the UHC/AACN NRP has been rated very highly for a fairly long period of time.

					and didactic topics very highly; it was difficult to maintain high response rates in repeated-measures design; and accreditation of residencies is essential to ensure quality.	
Trepanier, S., Early, S., Ulrich, B., & Cherry, B. (2012). New graduate nurse residency program: A cost-benefit analysis based on turnover and contract labor usage. *Nursing Economic$*, *30*(4), 207–214.	The purpose of the article was to perform a cost-benefit analysis to determine whether or not NRPs are worth building and implementing from strictly a financial perspective.	The impact of an NRP was assessed through secondary data analysis by a national healthcare provider that owns and operates 49 acute care facilities throughout the United States. The system put the NRP in practice in 15 of its community-based hospital settings and measured turnover before and after implementation. Data was also used to analyze the relationship between NRPs and contract labor	N = 15 hospitals. Unknown N for each facility.	Implementation of an NRP and assessment of the cost-benefit breakdown of such a program.	14 of the 15 hospitals who implemented the program showed a decrease in their turnover numbers and a significant financial savings. No facility lost money in the NRP implementation process. For all 15 facilities, the annual turnover cost (including contract labor costs) went from $17,977,500 to $2,749,500 resulting in over	Financial data is specific to each of the 15 hospitals. Financial data will vary based on geography and nursing workforce numbers in the area.

		usage (traveling RNs).			$15 million in savings.	
Trepanier, S., Yoder-Wise, P. S., Church, C. D., & Africa, L. (2020). Nurse leaders' assumptions and attitudes toward residency programs for new graduate nurses. *Nursing Administration Quarterly*, *45*(1), 26–34. https://doi.org/10.1097/naq.0000000000000442	The purpose of this study was to gather data related to perceptions of NRPs for those in nursing leadership.	Surveys collected from over 500 members of the American Organization for Nursing Leadership to assess their perceptions on the efficacy of NRPs and whether or not a national mandate to make NRPs a requirement at all healthcare facilities was viable.	N = 502	N/A	The results showed that the majority or survey respondents believed NRPs were beneficial to their organization. 42% of respondents thought that NRPs were valuable but did not have enough data to back their claims or that those in positions to implement NRPs viewed them as an expense versus an investment. Nursing leadership by and large is against national mandates that require implementation of NRPs as certain smaller facilities, hospitals, and	The survey results bring up further areas of questioning: why do some not support NRPs (and what data do they have to back that), does the size of the healthcare facility impact the perceptions around the NRP, and why did some respondents not see the value in the NRP?

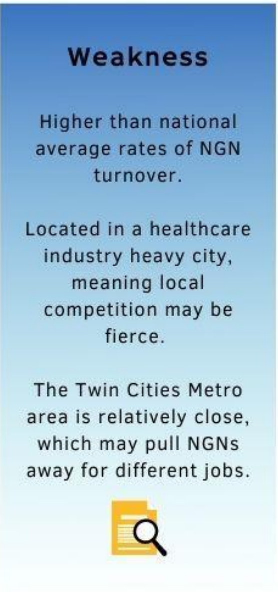
					critical access facilities likely do not have the resources.	
Van Camp, J., & Chappy, S. (2017). The effectiveness of nurse residency programs on retention: A systematic review. *AORN Journal*, *106*(2), 128–144. https://doi.org/10.1016/j.aorn.2017.06.003	Objectives were to identify commonly used NRPs in the literature, determine retention rates, and assess NGN satisfaction with and engagement in NRPs.	Literature review	N = 22	N/A	Data overwhelmingly shows that NRPs (both Versant and UHC/AACN) are effective at reducing turnover when implemented. NGN satisfaction also improved with NRP implementation.	Gives more details on the specific requirements of both the Versant and UHC/AACN model of NRP.
Rosenfeld, P., Glassman, K., & Capobianco, E. (2015). Evaluating the short- and long-term outcomes of a post-bsn residency program. *JONA: The Journal of Nursing Administration*, *45*(6), 331–338. https://doi.org/10.1097/nna.0000000000000211	The purpose of this retrospective case study was to assess the short term and long-term outcomes of an NRP over the course of an 8-year period.	Retrospective case study.	N = 671 NGN	N/A	Data showed that 90% of NGNs were still employed at the trial facility one year after their hire date. 65% were still employed in 2013 (start dates unavailable).	This study was conducted at only one facility, limiting results. Of special note is that this facility was shut down during Super Storm Sandy in 2012 which hampered data collection

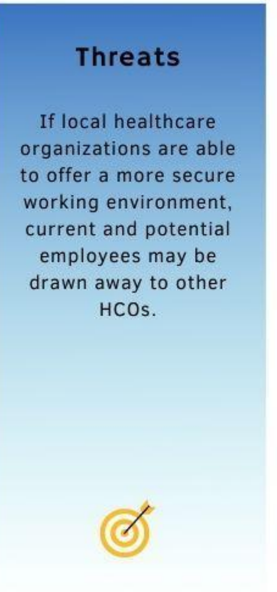
						during this time period.
AL-Dossary, R., Kitsantas, P., & Maddox, P. (2014). The impact of residency programs on new nurse graduates' clinical decision-making and leadership skills: A systematic review. *Nurse Education Today*, *34*(6), 1024–1028. https://doi.org/10.1016/j.nedt.2013.10.006	This literature review completed to look at the results of NRPs on clinical decision-making and leadership skills among new graduates who have successfully completed an NRP.	Literature review completed on research completed during years 1980 to 2013.	756 articles were included in the initial review. After being filtered through inclusion and exclusion criteria, 13 articles included in this literature review.	N/A	Literature supports the claims that NRPs help new graduates develop their clinical and critical-decision making skills. NGNs also report increased levels of confidence in their leadership skills, delegation, and	
Silvestre, J., Ulrich, B., Johnson, T., Spector, N., & Blegen, M. (2017). A multisite study on a new graduate registered nurse transition to practice program: Return on investment. *Nursing Economic$*, *35*(3), 110–118.	The purpose of this article is to demonstrate to healthcare organizations that NRPs are cost-effective and work in reducing the overall turnover rate of NGNs during the vulnerable first year of transition to practice.	Literature review.	Comparison of two cost/benefit analyses included in this article.	N/A	In each analysis, the cost/benefit shows that TTP programs and NRPs are an efficient, cost-effective method to reduce turnover among new graduates. The results overwhelmingly support NRPs as a long-term cost-saving method.	The analysis only included two studies. More evidence is needed to further corroborate the efficacy of NRPs.
Bae, S.-H., Mark, B., & Fried, B. (2010). Impact of nursing unit turnover on patient outcomes in hospitals. *Journal of Nursing Scholarship*, *42*(1), 40–49.	Bae et al., examine how turnover on nursing units affects workgroup processes	Secondary data analysis used to test a hypothetical model.	Patient and nurse data collected from 268	N/A	Units with lower levels of turnover had better work	Given the time frame of data collection,

https://doi.org/10.1111/j.1547-5069.2009.01319.x	and how those processes impact patient outcomes and satisfaction		nursing units across 141 different hospitals.		group cohesion rates, fewer falls, fewer medication errors and severe medication errors, and higher patient satisfaction scores.	the accuracy of information may be flawed. More longitudinal data is needed. The data analysis only took into consideration a few variables. Further iterations of similar studies should account for more.

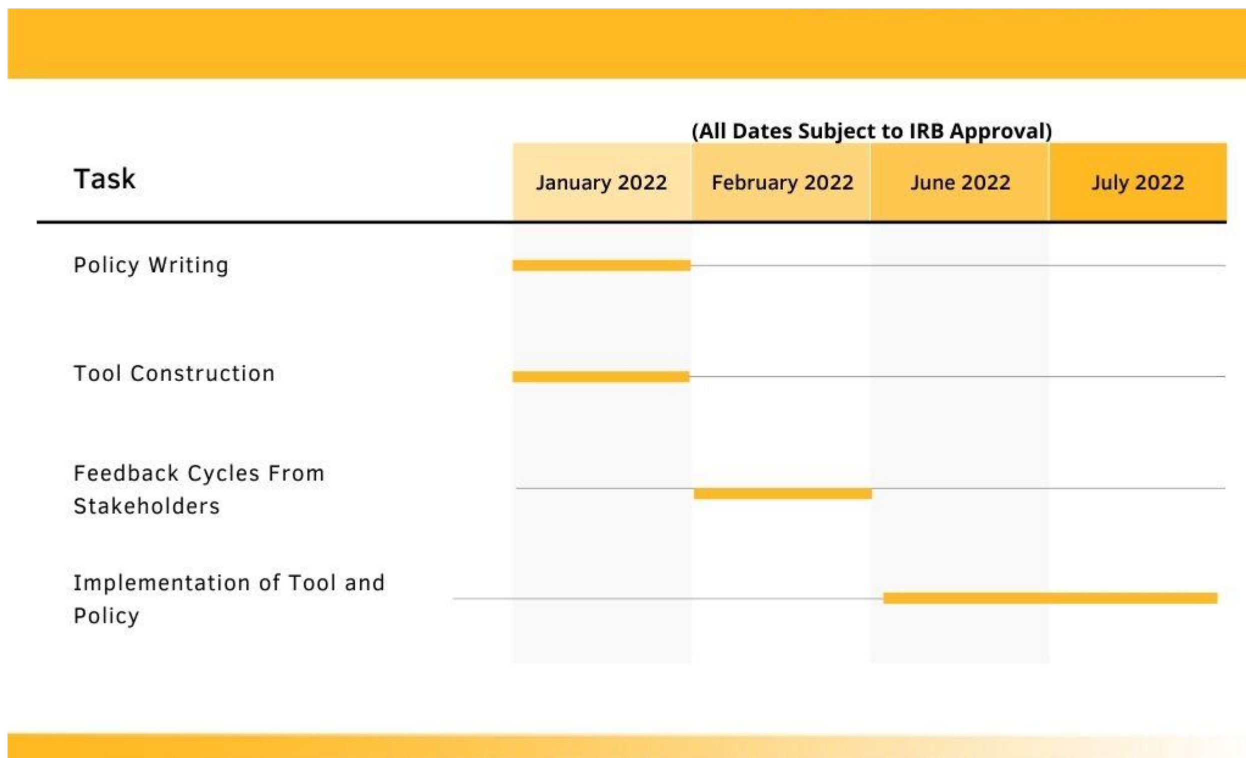
Appendix B: SWOT Analysis

S W O T





Appendix C: Gantt Chart



Appendix D: Logic Model