Mentoring Program for New Graduate Nurses

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Mentoring Program for New Graduate Nurses

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Abstract

Practice Problem: The high turnover rate among newly licensed nurses has a negative impact on organizational costs, healthcare spending and patient outcomes. The turnover rate among newly licensed nurses, within their first year of practice, at the designated facility was 50%.

PICOT: The PICOT question that guided this project was “In new graduate nurses, how does a formal mentorship program, compared to no formal mentorship, affect the intent to leave within six weeks?”

Evidence: The scientific evidence supported both one-on-one and group mentoring. Retention and/or turnover was shown to be a positive outcome of formal mentor programs.

Intervention: The intervention, aimed at reducing burnout among new graduate nurses, was a formal one-on-one mentoring program that included intentional mentor selection, matchmaking, and mentor training.

Outcome: The data demonstrated the intervention of participating in a formal mentorship, as a mentor for six weeks to newly licensed nurses, had a positive impact on the mentors, their job satisfaction, and their intention to continue working on the unit. The data demonstrated the intervention of being mentored, by an experienced nurse on the unit, positively impacted the newly licensed nurses’ intention to continue working on the unit and also demonstrated the mentorship program was recommended by all mentors, and mentees, and that the mentors had an impact on the decision of the mentees to stay or leave.

Conclusion: The program altered the working environment of newly licensed nurses and further supported the existing literature regarding formal mentoring programs. The formal mentorship program impacted the problem of high turnover among newly licensed registered nurses positively.
Mentoring Program for New Graduate Nurses

New graduate nurses enter the workforce with excitement and a readiness to utilize the skills and knowledge recently gained in nursing school. These feelings can quickly turn to disillusionment and disappointment with the realization of what nursing reality really looks like. With around 25-30% of nurses leaving the profession within the first year of practice (Bong, 2019; Nursing Solutions Inc., 2020), changes must be made to decrease turnover and to minimize feelings of burnout. This paper is aimed at describing interventions that have been supported by decreasing the instances of burnout, moral distress, and intention to leave their job, among newly licensed registered nurses (RN). The paper will discuss the significance of the problem across the world, regionally, and within the organization described. A thorough description of stakeholders, process and intervention, outcomes, measurement, and data analysis will be offered.

Significance of the Practice Problem

Burnout among nurses is a significant problem around the world. Studies have shown that nearly 17.5% of newly licensed nurses leave their first job within 12 months, and 33.5% leave within 24 months (Silvestre et al., 2017). This turnover is not only costly to employers, but also increases the impact of the current nationwide nursing shortage (Kutney-Lee et al., 2013; Nursing Solutions Inc., 2020), and directly impacts patient outcomes negatively (Choe et al., 2015).

Patients are impacted by nurse burnout in many ways. Nurses who experience burnout are more likely to show ambivalence towards the care they provide (Choe et al., 2015). This ambivalence can manifest as poor prioritization of tasks, lack of awareness of the individual, the practice of medical treatments that are not necessary, and the use of restraints and medications
when not clinically appropriate (Choe et al., 2015). A lack of empathy and consideration for ethical issues can lead to unnecessary suffering for the patient (Choe et al., 2015).

The impact of burnout does not stop at the patient. While loved-ones are ill, families have a need for open communication and a provider-family relationship. The need to talk and collect information can be challenged when caregivers are experiencing feelings of burnout. Engagement with the patient’s family may not happen when nurses are emotionally exhausted. Avoiding direct communication and shared-decision making is a potential problem with nurses who experience feelings of burnout (Buckley et al., 2019).

The average cost (nationwide) to replace a bedside RN is $44,000 ($33,000-$56,000). This translates to an average yearly organizational loss of $3.6 million to $6.1 million (Nursing Solutions Inc., 2020). The average cost to mentor and train new graduate nurses is an additional $30,000 per nurse (Sandler, 2018). While a gap exists within an organization due to an RN shortage, there are costly financial strategies in place. Those strategies include utilizing agency RNs, overtime for current staff, utilization of the company’s float pool, and bonus pay to entice workers to work more shifts (Nursing Solutions Inc., 2020). For obvious economic reasons, many healthcare organizations have included turnover rates in their strategic plans.

With an aging population, an increased focus on public reporting, new technologies such as the electronic medical record, and a requirement for lower cost of care and better quality, there is increased pressure from society on the healthcare system. The United States spends around 17.4% of its gross domestic product on healthcare, which is significantly more than most European countries who spend less than 10% (Aiken et al., 2012). The need to decrease this spending and increase efficiency has become increasingly difficult with the high rate of turnover related to burnout. Fewer numbers of nurses, combined with changing healthcare, is a
combination that will likely lead to poor outcomes for patients and the healthcare industry (Aiken et al., 2012). Recent legislative movements in the United States have been aimed at achieving safe nurse staffing and improved working environments. There are currently 20 individual states within the United States that are currently involved in legislation regarding safe nurse staffing (Aiken et al., 2012).

Many countries around the world (Korea, Sweden, Greece, Spain, Poland, Finland, United States, etc.) have been identified as reporting high levels of burnout and dissatisfaction among nurses, with the intention to leave their jobs (Kutney-Lee et al., 2013). In a cross-sectional study involving 61,168 bedside nurses and more than 130,000 patients, in 13 countries, it was found that nursing burnout and dissatisfaction is common (as high as 49% in some countries) around the world (Aiken et al., 2012).

The RN turnover rate in the United States in 2019 was 15.9%. First-year nursing turnover was a staggering 25.3%. Hospitals in the South Central (AR, AZ, CO, LA, NM, OK, TX & UT) region of the United States experienced turnover in 2019 at a rate of 16.7%. Hospitals that operated less than 200 beds experienced turnover at 18.0% in 2019 (Nursing Solutions Inc., 2020). In the 2020 Nursing Solutions Incorporated’s (NSI) National Health Care Retention and RN Staffing Report (NSI, 2020), scheduling, immediate manager, workload, staffing ratios and culture were listed as reasons for voluntary termination.

The organization selected for this project was a small 52-bed acute care hospital located an hour south of a metropolitan area in Colorado. The turnover rate for nurses within this facility on the designated unit in 2019 was 41%. The turnover rate for newly licensed RNs within the first three years of practice in 2019 was 50% (Centura Health, 2020).
**PICOT Question**

The PICOT question for this project was, “In new graduate nurses, how does a formal mentorship program, compared to no formal mentorship, affect the intent to leave within six weeks?”

The population identified for this project was newly licensed registered nurses. The definition of a newly licensed nurse was a registered nurse who had been in the practice setting for less than three years. This specific population was working on the Acute Care Unit at the designated facility. The group was comprised of all adults, male and female, and all baccalaureate prepared registered nurses.

The intervention sought to improve the nurse work environment in a six-week time span from implementation to data collection. Improvements were expected in the areas of relationships, nursing leadership and hospital-wide involvement (Kutney-Lee et al., 2014). The comparison group consisted of the previous new graduate turnover rate (fiscal year 2019) monitored by the human resources department annually. Outcomes were measured by survey results with questions regarding intentions to leave current positions and job dissatisfaction (Kutney-Lee et al., 2014) at six-weeks post implementation.

**Evidence-Based Practice (EBP) Model and Change Theory**

Change in nursing is inevitable. The responsibility of a successful project or process change often falls on nursing leaders. Leading change requires support and framework for the change and for the project itself. Because leading change can be so difficult, nurse leaders must be ready to partner and staff, navigate barriers, and generate and utilize resources.
EBP Model

The facilitation of practice change, based on existing evidence, was achieved through The Iowa Model (see Appendix A) which guided the EBP process (Iowa Model Collaborative, 2017). The Iowa Model is an algorithm that begins by identifying triggering issues or opportunities within the organization. In this case, an organizational initiative of reducing turnover was selected. Once the problem was identified, the development of the PICOT question and the formation of a team of stakeholders (mentors, new graduate nurses, quality leaders, unit leadership, executive team, and project manager) was completed.

This led to an appraisal and synthesis of literature, through systematic research, where the quality, quantity and consistency of data was compiled. It was determined that sufficient evidence was available to move forward with implementation. A practice change (formal mentor program for new graduate nurses) was designed by utilizing existing programs found in evidence. This practice change included the consideration of resources, approvals needed to implement, collection of baseline data, the development of an implementation (one-on-one mentor training and mentor guide) and evaluation plan (surveys), and finally the preparation of teaching materials.

Following data collection and analysis the project manager utilized the Iowa Model to determine if the change was appropriate to be permanently adopted in practice within the organization. The data proved to be favorable and a sustained practice change was integrated. This change, according to the Iowa Model, was integrated by identifying and engaging key personnel, hardwiring the change into the system, monitoring key indicators and reinforcing as needed (Iowa Model Collaborative, 2017). Finally, results were disseminated within the organization and externally in the form a poster presentation.
Change Theory

The Phases of Change Theory was selected because of the focus on the role and responsibility of the intervention, rather than the process of the change (Lippitt et al., 1958). The seven steps in this theory included: 1) diagnostics (problem); 2) assessment of change capacity; 3) resource and motivation assessment; 4) establishing objectives and strategies; 5) role definition of the intervention; 6) change maintenance; and 7) termination of the helping relationship as the culture began to own the change (Lippitt et al., 1958).

All steps within this model placed an emphasis on those who were impacted by the change. This was appropriate for this project because it allowed for involvement from the new graduate nurses in the areas of communication skills, rapport building, problem-solving strategies, and creating ways for feedback (Wagner, 2018).

Evidence Search Strategy and Results

An evidence search was done using CINAHL Complete database using the terms “new graduate nurses, mentor, and turnover.” The date range for the search was 2008-2020 and the search was limited to full-text articles in English. This search yielded 25 articles. Four articles were excluded due to duplication. Inclusion criteria required that the article addressed the PICOT question and offered mentorship that decreased the turnover rate in new graduate nurses. Following an abstract review, five additional articles were excluded because they focused on topics such as graduate nursing programs and other departments unrelated to the practice setting for the project, such as the operating room. Following exclusions, 16 articles were included.

An evidence search was also done using PubMed using the same terms, date range, and language selection. This search yielded 21 full-text articles. Four duplicates to articles found in the CINAHL database were excluded. Thirteen articles were excluded following an abstract
review due to a focus on topics such as incivility, preceptor models, situational training, recruitment and simulation. There was also a focus on the rural setting in one article which differed significantly from the practice setting. Four articles were included in the evidence and were added to the 16 articles from CINAHL equaling 20 articles. Appendix B displays the evidence search in a PRISMA diagram.

**Evidence Evaluation**

Using the final 13 research articles generated by the search strategy the strength of the evidence was determined to be moderate-strong. Using the Johns Hopkins Nursing EBP: Levels of Evidence hierarchy (Dang & Dearholt, 2012), all articles were ranked by evaluating the quality of the design and validity. Two articles were Level II quasi-experimental studies. The remaining articles included three Level II pilot studies, one Level III retrospective cross-sectional study, one Level IV descriptive study, one Level I non-randomized control study, one Level IV opinion paper, and one Level V article based on personal experience/opinion. Three systematic reviews of only randomized control trials were also included at Level V. This was determined by using the Levels of Evidence Hierarchy by Mosby Elsevier (Ackley et al., 2008). Appendices C and D discuss each article individually. Appendix E offers a description of the levels of strength of the recommendation.

**Themes from the Evidence**

Due to variability in the literature from program-to-program that described positive outcomes, it was difficult to determine what path would have been the most effective. All mentor programs in the literature were analyzed and compared for common themes.
Mentorship Programs

It is important to note that while all articles supported a formal mentorship program, there was some variation among the recommendation of a one-on-one or group mentorship. A one-on-one mentorship was suggested to have the potential to decrease turnover anywhere from two to 15% in one study (Zhang et al., 2019). A one-on-one mentorship was also described as effective in five additional studies (Cottingham et al., 2011; Fox, 2010; Malott, 2012; Schroyer et al., 2020; Williams et al., 2018). Group mentors (one mentor with multiple protégés) were also found to be effective and recommended when incorporated with one-on-one mentorship (Latham et al., 2011; Mallott, 2011, Williams et al., 2018).

Mentor Training

Four studies specifically discussed the need for formal training for mentors prior to the start of the program. Essential training in one program included certification training, a formal orientation, and periodic training classes. These classes covered topics like conflict resolution, successful mentoring, and skills (Zhang et al., 2018). One study required all mentors to attend classes that addressed learning styles, motivation, and socialization of the new employee (Latham et al., 2011). Two programs also utilized personality testing during the mentor training sessions, like the Myers-Briggs Type Indicator (Fox, 2013; Latham et al., 2011). Required training sessions were also utilized in two other studies where a one-day class was used covering topics like working with different age-groups, how to overcome barriers, critical thinking, and trust building (Fox, 2013; Malott, 2012).

Mentor Recruiting

The role of the mentor is essential in a formal mentor program. Four studies specifically discussed the need for intentional mentor recruiting and selection. Because the mentor selected
can directly impact the effectiveness of the program, one article focused a great deal on the selection of the mentor by generating a mentor pool where interested applicants were placed (Zhang et al., 2019). In most studies, mentors were asked to apply for the program instead of being appointed, were nurses who were up-to-date on practice standards, and were considered to be experts on their respective units (Fox, 2013; Latham et al., 2011). In another program, nurse managers used criteria lists in order to select mentors from the pool of experienced nurses (Fox, 2013). In a pilot study, mentors were recruited based on educational levels and were required to hold at least a bachelor’s degree in nursing. These mentors were initially recruited through the use of brochures that were hand-delivered if identified by a leader as a potential quality mentor (Cottingham et al., 2011).

**Mentor and Protégé Matching**

Nurse managers used criteria lists in order to create pairs in some studies. This process required the pair to have the same educational background, work similar schedules, and may not be expecting to be on leave for more than 12 weeks during the first year (Fox, 2013). In one study, the protégés were allowed to choose their mentor after watching taped clips with viewpoints on nursing (Latham et al., 2011). Another study created a process where the protégé and head nurse selected a mentor together. After the experienced RNs were granted permission to be in the mentor pool, they were then put on the list of available mentors. It was encouraged that the protégé selected a mentor who shared the same values, interests, and hobbies as to enhance mutual attraction (Zhang et al., 2019).

**Job Satisfaction**

While most studies were aimed at retention rates, it was discovered that increased job satisfaction was a positive by-product of a formal mentorship program in four studies. Job
satisfaction was evaluated and described as it related to professional growth goals, informal leadership through the mentor role, increased engagement, supportive relationships, appreciation at work, feelings that mistakes are treated as learning opportunities, shared decision making, and respect (Frost et al., 2013; Halfer et al., 2008; Latham et al., 2011; Schroyer et al., 2020).

Results of increased job satisfaction were collected through Likert style questionnaires (Latham et al., 2011), surveys (Schroyer et al., 2020), and interviews (Halfer et al., 2008).

**Retention/Turnover**

Eight articles discussed retention and/or turnover as a positive outcome of formal mentor programs. A 325-bed acute care hospital in Indiana saw a 25% difference in the rate of retained nurses who had a mentor versus those who did not (Schroyer et al., 2020). In a pilot study, a zero percent turnover rate was seen during the first year of the mentor program, a decrease from 31% to 10.3% for year two, and a decrease from 31% to 10.3% for all other RNs with experience (Fox, 2010). A second study also demonstrated a 100% rate of retained RNs with the implementation of a formal mentoring program (Cottingham et al., 2011). Over 3,000 new graduate nurses were surveyed across fourteen states in a retrospective cross-sectional study following a formal mentor program, showing that 95.3% of those newly graduated RNs had no intention to leave their job (Williams et al., 2018). Other studies demonstrated that turnover rates improved anywhere from eight to 21% (Frost et al., 2013; Halfer et al., 2008; Latham et al., 2011).

**Transition to Practice**

Five articles discussed the time period of “transition to practice.” It was during this time period where a newly graduated nurse transitioned from the role of a student into the role of a professional nurse. It was during this time period when a newly licensed RN developed a
personal practice apart from others and can often feel unprepared for practice and skill mastery (Berezuik, 2010). It was suggested that mentorship can impact this period of time so significantly, it can directly impact the nurse turnover rate (Zhang et al., 2019). A mentor can help a new graduate nurse by easing the transition from student to practicing nurse (Halfer et al., 2008; Malott, 2012; Williams et al., 2018).

**Practice Recommendations**

Following a thorough analysis of the available evidence, it was determined that the recommendation for practice, aimed at reducing burnout among new graduate nurses, was to implement a formal one-on-one mentoring program that included intentional mentor selection, matchmaking, and mentor training. This recommendation was born out of a review of scientific evidence and was based on interventions consistent between multiple studies. For the purpose of this class, results were measured at six weeks.

Using recommendations from two Level II quasi-experimental descriptive studies (Latham et al., 2011; Schroyer et al., 2020) and two Level II pilot studies (Cottingham et al., 2011; Fox, 2010), mentors were selected based off of years-of-experience, desire to mentor, and clinical skill level. Once mentors were selected, they were matched with a protégé based on the recommendation of a Level II quasi-experimental study (Latham et al., 2011), a Level II pilot study (Fox, 2010) and a Level I non-randomized control study (Zhang et al., 2019) by using personality testing, similar schedules, and common interests.

The scientific evidence supported both one-on-one and group mentoring (Latham et al., 2011; Mallott, 2011, Williams et al., 2018). However, the cost of one-on-one mentoring was less expensive and easier to arrange meetings between mentors and protégés (taking into consideration the available resources). The cost-difference and ease of facilitation was
considered and led to the decision to implement one-on-one mentoring only. One-on-one mentoring was supported by a Level I non-randomized control trial (Zhang et al., 2019), two Level II pilot studies (Cottingham et al., 2011; Fox, 2010), a Level II quasi-experimental study (Schroyer et al., 2020), a Level III retrospective cross-sectional research study (Williams et al., 2018) and a level II pilot study (Malott, 2012).

Project Setting

The setting was a 28-bed acute care unit serving a mixed population of surgical and medical patients. On average, the unit admitted 10 to 15 patients and discharged 10 to 15 patients in a 24-hour period. The hospital was small and located an hour south of the nearest major city and was a vital resource to many rural communities.

The designated facility was part of a larger organization boasting 17 hospitals, many clinics, stand-alone emergency rooms, and urgent cares throughout two states, thus providing access to many resources that typically would not be available to such a small facility. If the organization chooses to do so, this program could be implemented throughout many hospitals in both states.

The mission of the organization was “to extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.” The vision of the organization was “every community, every neighborhood, every life – whole and healthy.”

Organizational need was established and support was confirmed through an evaluation of quality metrics with the director of quality and the Chief Nursing Officer. Both parties agreed that a mentor program could benefit the new graduate nurses entering the workforce. Through use of the Institute of Healthcare Improvement (IHI) self-assessment tool and the checklist to assess organizational readiness (CARI) for EIP implementation, organizational readiness for
change was addressed. The IHI tool showed rankings in most categories (results, resources, data and competence) at the “significant impact” level. The leadership for improvement category earned a “making progress” ranking (Institute for Healthcare Improvement (IHI), 2010). These scores were based off of previous EBP projects (ex: aromatherapy for nausea), available resources, and overall climate. The CARI tool identified strengths to include organizational capacity/culture, functional considerations, and implementation plan (Barwick, 2010). There was room for improvement in the categories of system and staff capacity, training (smaller facility size limits staff and resource availability), and senior leadership. CARI for EIP implementation is similar to the IHI self-assessment tool because they both allow for an evaluation of the capacity, climate, and support needed for change. Both tools identified an area of weakness in leadership support at both a system and organizational level, which is essential in implementing effective change (Yoo et al., 2019). While the IHI tool showed that previous EBP projects have shown sustained improvement, the CARI tool did not address previous work at all and the impact on readiness. In understanding that organizational culture/climate is essential in reducing barriers to successful EBP implementation (Lundren et al., 2013), it was addressed with the CARI tool specifically (and in general with the IHI tool) and was identified as a strength for the organization. The synthesis of the data suggested that the organization was ready for change and had enough support to do so (Palermo, 2020).

SWOT Analysis

An analysis of the organization’s strengths, weaknesses, opportunities and threats (SWOT) was completed in order to offer a better awareness of the current status and to assist in planning and decision-making (see Appendix F). In light of the high rate of burnout and turnover, it was important to determine what the best path was and where change was possible.
In this analysis, it was identified that strengths included the membership within a large organization, an established preceptor program, supportive executive team, motivated hospital-wide educator and diverse nursing team. Opportunities included the lack of a mentor program, a large number of new graduate nurses three times per year and much room for improvement in the turnover rate.

The SWOT analysis also included the evaluation of negative aspects within and outside of the organization. Weaknesses or limitations included a limited number of mentors among the nursing staff, a short amount of time to implement the project, small budget, no available time for formal mentor training and the physical limitations related to the pandemic. Threats discovered included the possibility of new graduate acceptance into a residency program at six months, further budget cuts within the organization and decreased healthcare utilization related to the pandemic.

**Project Overview**

The vision and mission of this project were to create a culture that supported new graduate nurses professionally, emotionally and mentally. The objectives of the project were to implement a formal mentor program for all new graduate nurses and to see a decrease in the intent to leave in that same population at the end of six weeks. The mission and vision of the organization sought to extend healing to those who are ill and to maintain health in all parts of the community. The organizational mission and vision were in alignment with the project’s mission and vision as they all sought to achieve and maintain health.

The short-term objective was to develop and implement a formal mentoring program for all new graduate nurses by October, 2020. This formal mentoring program was built on the
recommendations based on the literature. The long-term objective was to see $\leq 50\%$ intent to leave rate within the new graduate nurse population by six weeks.

Risks of the project included the chance that the mentors and protégés would not connect on a personal level, which could have led to discontent within the team. Unintended consequences of the project included the possibility that an increase in satisfaction could have been seen within the mentor group because of job/personal fulfilment. This was accounted for through the use of mentor surveys six-weeks post-implementation.

**Project Plan (Method)**

This Phases of Change Theory was applied to the project implementation and determined to be an excellent fit. Step one (problem diagnosis) was accomplished through a discussion with the director of the quality department, human resources and chief nursing officer. The problem of high turnover related to burnout was identified as the problem. Step two (assessment of change capacity) was accomplished through the use of the Institute of Healthcare Improvement’s (IHI) self-assessment tool. The Checklist to Assess Readiness for Implementation (CARI) was also used to assess organizational readiness for project implementation (IHI, n.d.). Step three (resource and motivation assessment) was accomplished through the use of a SWOT analysis. It was determined that although negatives, like a minimal budget and minimal resources, were identified, enough opportunities and strengths existed to oppose the negatives.

Step four (establishing objectives and strategies) was achieved in partnership with the director of the quality department and the director of human resources. The timeline was discussed as well as the short-term and long-term objectives. Step five (role definition of the intervention) was achieved through a literature review and analysis. Common themes in the evidence were identified and recommendations were developed into a plan for implementation.
Step six and seven (change maintenance and termination of the helping relationship) were achieved simultaneously with the initial implementation of the project. Mentor and protégé pairing occurred as a standard part of new graduate schedule planning and was adopted by the designated unit. The manager and clinical nurse coordinators on the unit agreed to continue the practice with each new cohort.

Mentors were recruited, with the use of a flyer (see Appendix G) and paired with a single mentee (protégé) by the project manager. Once assigned, the mentors met individually with the project manager. A mentor guide (see Appendix H), created by the project manager, was used as a guide for mentor education and also served as a guide designed to lead the mentor in the role. The mentors completed the exercises and followed the steps in the mentor guide in pursuing a relationship with the mentee independently. A survey was sent to the mentees after six weeks to evaluate program effectiveness (see Appendix H for mentee survey questions).

All steps within this model placed an emphasis on those who were impacted by the change. This was appropriate for the project because it allowed for involvement from the new graduate nurses in the areas of communication skills, rapport building, problem-solving strategies, and creating ways for feedback (Wagner, 2018).

**Schedule and Budget**

A minimal budget was available for this project due to financial constraints from the COVID-19 pandemic. Mentor training was projected to cost around $500 and was accomplished mostly during working hours. This was done by the project manager. Supplies were estimated to cost around $600 and included printing materials, notebook binding, and a $25 gift card for each mentor. These costs were supposed to be supplied by both the designated unit and the quality department, however the funding was never supplied because of cost-constraints related
to the COVID-19 pandemic. The overhead costs to implement and run the program were estimated to be $1,000. Because this project was being implemented during clinical hours, the actual cost was minimal. See Table 1 for a visual representation.

**Table 1**

*Budget*

<table>
<thead>
<tr>
<th>Expenses (per year)</th>
<th>Total: $2,100</th>
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</thead>
<tbody>
<tr>
<td>Training Mentors</td>
<td>$500</td>
</tr>
<tr>
<td>Supplies (mentor manual, Starbucks gift cards, etc.)</td>
<td>$600</td>
</tr>
<tr>
<td>Cost to run the program (hourly/ salary cost):</td>
<td>$1,000</td>
</tr>
<tr>
<td>Surveys, presenting, pairing mentor and protégé, training mentors, etc.</td>
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</tr>
</tbody>
</table>

Appendix I shows the projected timeline of the project. The first term of capstone was designated for the planning stage of the project and included tasks like meeting with the quality director and educators. Other tasks included the development of the project proposal, development of mentor training and obtaining approval from the executive leadership team as well as the organizational evidence-based practice committee.

During the second term of the capstone project tasks like in-person mentor training, initial survey, presentations to leadership councils, program implementation and maintenance, and the final survey were all planned. In the final term of the capstone, a final presentation to the administrative team took place following data collection, outcome comparison, and evaluation. Appendix J offers a GANTT chart representing objectives and timeline that were met. This chart
differs from the schedule because it offers a responsible party for each task, responsibilities and expected dates.

**Results**

A thorough project proposal was developed and submitted to The University of St. Augustine for Health Sciences’ EBP Project Review Council (EPRC). Following revisions, approval was gained to implement the EBP project at the designated clinical site. The project proposal was then presented to the organization’s EBP council, clinical leadership on the unit where the project was being implemented, and to the director of the quality department at the hospital. Approval was gained following each presentation to implement the project.

The recruitment of mentors started with a voluntary application to participate as a mentor. The application was simple and only required the potential mentor to submit a short personal and professional biography. In order to apply for a mentor position, the applicant was required to have at least one-year of experience as an RN. There were no other exclusion criteria. All protégés were enrolled in the program when they began the newly licensed RN program at the hospital.

Participants consisted of five newly licensed nurses (mentees or protégés) who obtained licensure within six months prior to hire and five experienced nurses (mentors). Two mentees were male, three were female, and all held a Bachelor’s of Science in Nursing degree. All five mentors (four females and one male) held at least a Bachelor’s of Science in Nursing.

The environment was the same for all participants therefore, no descriptive differentiating information was necessary. The description of the environment can be found in the project settings section of this paper. Survey data was used to determine project success at six weeks. The questions asked to participants were regarding the protégé’s intent to leave (see Appendix
K). Outcome data was determined by the number of protégés who indicated they intended to remain working within the facility at 12 months following their hire date.

Data collection, analyzing, and storage was done by the project manager. The integrity of the process was high because it was collected through the use of Survey Monkey, analyzed by calculating a rate using Intellectus Statistics Software, and stored on a password protected computer. There was no missing data. Each participant completed the survey.

The integrity of the data source was high due to an online survey through the free platform Survey Monkey. A customized survey, that was only accessible with the correct password, was created. The participants were asked to take the survey while separated from co-workers in an effort to eliminate any extraneous influences.

Formative evaluation took place intermittently over the six-week project through informal check-ins with protégés and mentors. This was necessary to determine if the pairs felt as though the program was beneficial and to determine how frequently pairs were meeting and to allow for changes to be made while the project was in motion. Summative evaluation happened at six-weeks after the program initiation, through the use of a survey to determine the protégé’s intent to leave within one-year.

No health information was collected or used during this project. Human rights were protected by making mentorship optional for mentors and mentees. The mentees were allowed to help select a mentor, but none requested this. If a pairing was not working, exceptions were to be made to create more successful relationship, but this was not necessary. No identifying information was used in the data collection or description.
Data Analysis

Descriptive analysis was used to evaluate the collected data from both surveys. This analysis was done through the utilization of Intellectus Statistics Software. Descriptive statistics was selected because of the small data set and the exploratory method to examine the variables (Intellectus Statistics, 2020). All variables (participants, gender, and question responses) were entered into the software. Descriptive analysis was selected from the available tools and an analysis was automatically performed by the software. Table 2 below displays all categories of measures, benchmarks, and statistical tests used to determine if a significant improvement was achieved. Tables 3, 4, and 5 offer the descriptive analysis results used to evaluate the data.

Table 2

*Measures, Benchmarks and Statistical Tests*

<table>
<thead>
<tr>
<th>Category</th>
<th>Measure</th>
<th>Benchmark</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>Intent to leave (percentage)</td>
<td>&lt;=50%</td>
<td>Descriptive Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(nominal)</td>
<td></td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Percentage of pairs that connect weekly outside of work (virtual or in-person)</td>
<td>100%</td>
<td>N/A</td>
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<tr>
<td></td>
<td></td>
<td>(nominal)</td>
<td></td>
</tr>
<tr>
<td><strong>Balancing</strong></td>
<td>Staff satisfaction (mentors)</td>
<td>&gt;=65%</td>
<td>Descriptive Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(nominal)</td>
<td></td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
<td>Organizational acceptance and permission to implement permanently</td>
<td>YES</td>
<td>N/A</td>
</tr>
</tbody>
</table>
**Outcome**

A statistically significant improvement was determined because the intent to leave within 12 months of hire (mentees) was 20%. More importantly, the outcome is considered to be clinically meaningful, or meaningful to the staff, because the intent to leave was less than or equal to 25%. The meaningfulness was determined by considering the baseline turnover rate in 2019 of 41% (all nurses) and 50% (newly licensed nurses).

**Process**

The process measure benchmark was set at 100% and this measure was achieved. Each week the pairs were asked to meet either virtually or in-person during the six-week project. The project manager checked-in with the pairs to ensure meetings taking place.

**Balancing**

The balancing measure benchmark was set at greater than, or equal to, 65% staff satisfaction. Through descriptive analysis it was determined the benchmark was successfully achieved by obtaining staff satisfaction of 65% (mean). Descriptive analysis was used to evaluate the mentor’s job satisfaction at the completion of the six-week project by averaging the scores collected through the surveys.

**Sustainability**

Organizational acceptance is the benchmark of success for sustainability. This measure is still in progress and has yet to be obtained. Both mentors and mentees (100%) recommended the program for the future.

**Discussion of Data Evaluation**

The data collected determined the intervention effectively impacted the practice problem of high turnover rates that drove this project. This was evidenced by the high rate of intention to
stay by both mentors and mentees, high rate of mentor satisfaction, and the recommendation of the program by all participants. This post-survey comparison design demonstrated an outcome of decreased burnout among new graduate nurses evidenced by a lower likelihood to resign.

Summary statistics (Appendix L) were calculated for each interval and ratio variable. The observations for job satisfaction among mentors had an average of 6.80, or 65%, (SD = 1.30, SEₘ = 0.58, Min = 5.00, Max = 8.00, Skewness = -0.36, Kurtosis = -1.37) (Intellectus Statistics, 2020). The skewness was not greater than two in absolute value which means that the variable was not considered to be asymmetrical about its mean. The kurtosis was less than three, meaning the variable's distribution was not markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013).

The mentor job satisfaction rate of 65% demonstrated the intervention had a positive impact on the group of mentors overall. This balancing outcome was expected to be demonstrated as a by-product of the project as the evidence suggested.

Frequencies and percentages (see Appendix L) were calculated for each nominal and ordinal variable. The most frequently observed categories of “intention to work past 12 months” for mentors were “yes” (60%) and “no” (40%). The most frequently observed categories of “intention to work past 12 months” for mentees were “yes” (80%) and “no” (20%). The most frequently observed categories of “intention to work past 18 months” for mentees were “yes” (60%) and “no” (40%). The most frequently observed category of “has the mentorship impacted you positively” for mentors was “yes” (100%). The most frequently observed categories of “has the mentorship impacted your decision to stay” for mentees were “yes” (80%) and “no” (20%). The most frequently observed category of “would you recommend the program” for both mentors and mentees was “yes” (n = 10, 100%) (Intellectus Statistics, 2020).
Data demonstrated the intervention of participating in a formal mentorship, as a mentor for six weeks to newly licensed nurses, had a positive impact on the mentors, their job satisfaction, and their intention to continue working on the unit. Data also demonstrated the intervention of being mentored, by an experienced nurse on the unit, positively impacted the newly licensed nurses’ intention to continue working on the unit and also demonstrated the mentorship program was recommended by all mentors, and mentees, and that the mentors had an impact on the decision of the mentees to stay or leave.

Two mentees and one mentor indicated, in the comments portion of the survey, the opportunity to participate in a residency program on a specialty unit, offered within the organization, was a reason that they would leave the unit eventually. One mentor indicated they had decided to leave because of a position within the float team that offered higher pay. Three mentors indicated, in the comments portion of the survey, the program could be more successful if the leadership team offered more support. The data displayed a clearly positive relationship between the intervention and the outcome.

Impact

This project has impacted the problem of high turnover among newly licensed registered nurses in a positive way. The high rate of “intention to stay beyond 12 months of hire,” indicated in the collected data, supports the intervention of a formal mentor program. The project addressed the problem by making changes in the working environment through the establishment of relationships (mentorship) between newly licensed RNs and experienced RNs. The project has altered the practice at the designated facility by creating an additional support, in the form of a mentor, for newly licensed RNs.
A consistently low turnover rate, among newly licensed nurses, is a future implication. This low turnover rate could contribute to greater staff satisfaction overall (Frost et al., 2013; Halfer et al., 2008; Latham et al., 2011; Schroyer et al., 2020), more engaged nurses who provide higher quality care (Berezuik, 2010), and a more cohesive care team. If these can be achieved, and sustained, the larger organization may decide to implement the new practice within all 17 facilities.

In order to further improve the turnover rate among newly licensed RNs, there should be a more thoughtful and in-depth selection process during the hiring process. In the post-intervention surveys, two newly licensed RNs indicated that they would eventually leave the unit to seek specialty units like emergency medicine or pediatrics. It is not beneficial to hire an RN who intends to transfer units shortly following hire. The length of the mentorship should also be increased to one full year from the date of hire as this would provide an ongoing relationship after orientation has ended, and would offer support as the newly licensed nurse develops their own practice. This would also offer the newly licensed nurse support in difficult situations that may arise.

In order to maintain sustainability of the program there must be more support from the unit leadership team. Monetary incentives were offered to the mentors to participate in the program, but the leadership team was unable to deliver those incentives. An incentive is needed to attract more experienced nurses to the role of mentor. There would also need to be a person assigned as the long-term coordinator/facilitator. This role is essential for mentor recruitment, proper training for mentors, pairing, scheduling, and evaluation of on-going effectiveness.
Limitations

This project has potential limitations. The small data set may not represent true nursing turnover. Due to the small sample size, statistical measurement could not be done utilizing the chi-Squared method. Descriptive analytics was used instead, as recommended by Intellectus Statistics. In the future, it is recommended that a larger data set be used in order to truly represent the newly licensed nurse population and to provide more data to analyze the relationship to the variable. Other limitations include the time constraint of six weeks for implementation and unforeseen pandemic-related restrictions. The time restriction did not allow for participant sampling and surveying at several different points in time to monitor for effectiveness. A future study is recommended to span a longer period of time. This study should also be conducted during a time when the worldwide health crisis has subsided. This would allow for more socializing and gathering as a group, which could impact the results.

Plans for Dissemination

Dissemination within the organization will occur in different formats aimed at reaching different audiences. The dissemination of findings will first occur with the bedside staff who participated in the mentor program. This will happen through staff meetings and the unit newsletter that is distributed via email every Friday. Dissemination within the hospital will happen in a virtual presentation sent to the hospital’s leadership team. This team consists of a nurse manager and director from each unit, the entire executive team, the hospital-wide educator, and the quality team. The information will be presented in a recorded and narrated power point discussed by the project manager. Finally, the information will be offered as a narrative in the hospital’s monthly newsletter that is distributed via email to all associates. Dissemination within
the corporation will occur as a presentation, utilizing the same power point shared with the hospital leadership team.

**Professional Sharing**

This project will be shared at the annual EBP conference hosted by the designated organization. The EBP conference is held at Denver University each November. In order to have this project accepted and to earn a position as a presenter, an abstract and a sample of the poster that will be used will be virtually submitted. The University of St. Augustine’s SOAR@USA publication platform will be utilized to share this project. The manuscript will also be submitted to MEDSURG Nursing, a nursing journal, for publication.

**Peer Review**

Peer review will occur prior to submitting the abstract for consideration as a presentation at the evidence-based conference. The peer review will be done blindly as the reviewers will be asked to review the full project without knowing the author. The preceptor at the designated facility, who is associated with this project, will submit the project to several of her professional colleagues and ask them to do a peer review with comments.

**Conclusion**

The intention of this project was to impact the working environment and professional relationships among newly licensed nurses, thus positively impacting the high turnover rate among this population. The intention was achieved successfully, through the implementation of a formal mentorship program, as evidenced by the intentions of the participants to remain working on the unit at least 12 months beyond the date of hire.

Initially, a thorough literature review, analysis, and synthesis was conducted. The implementation of a formal mentorship program was selected based on the supporting evidence.
Mentors were selected and trained individually using a mentor guide. Program evaluation was completed through the use of anonymous surveys for both mentors and mentees. Data demonstrated a positive impact of the mentorship program for both job satisfaction of the mentors, as well as the turnover rate for the newly licensed nurses.
References


https://www.thefreelibrary.com/Understanding+Moral+Distress%3A+How+to+Decrease+Turnover+Rates+of+New...-a0592139555


Centura Health (2020). Quality dashboard [pdf].


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https://link.gale.com/apps/doc/A609782046/AONE?u=lim55718&sid=AONE&xid=1c3fd5d05


Appendix A

EBP Model – IOWA Model
Appendix B

PRISMA Flow Diagram
## Appendix C
Summary of Primary Research Evidence

<table>
<thead>
<tr>
<th>Citation</th>
<th>Design &amp; Level Quality Grade</th>
<th>Sample Setting Sample size</th>
<th>Intervention</th>
<th>Theoretical Foundation (if discussed)</th>
<th>Outcome Definition</th>
<th>Results Key Findings</th>
<th>Usefulness &amp; Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schroyer, C., Zellers, R. &amp; Abraham, S. (2020). Increasing registered nurse retention using mentors in critical care services. <em>The Health Care Manager, 39</em>(2), 85-99.</td>
<td>Quasi-experimental descriptive research, Level II, High Quality</td>
<td>RNs were from a 325 bed acute care hospital in Indiana. 32 mentees &amp; 35 mentors in the experimental group. 35 RNs in the control group. RNs were from all inpatient units.</td>
<td>70 newly hired RNs were split into 2 groups. Group 1 was assigned an experienced RN as a mentor for the first year and group 2 was not assigned a mentor. Retrospective review was done to determine retention rates as well as descriptive surveys. P=.009 ($X^2$) proving the alternate hypothesis: there is an association between mentorship and retention rates.</td>
<td>Benner’s theory that nurses gain knowledge, competence, confidence, and comfort in managing the tasks of nursing through the concept of novice to expert.</td>
<td>Retention rate (ratio of employees who continue to be employed after a certain period)</td>
<td>Positive implications related to using a mentor program. Nurses with a mentor were retained at a 25% higher rate than those not mentored. Control group had a retention rate of 66% while the experimental group’s rate was 91%. Other potential implications include increased patient satisfaction and significant organizational cost savings.</td>
<td></td>
</tr>
<tr>
<td>Fox, K. (2010). Mentor program boosts new nurses’ satisfaction and lowers turnover rate. <em>The Journal of Continuing Pilot Study.</em> Level II. Moderate Quality.</td>
<td>Pilot Study. Level II. Moderate Quality.</td>
<td>12 RN pairs (Mentor &amp; Protégé) from all inpatient units from St. Francis Hospital and Intervention assigned a mentor to a protégé for a 12-month long mentorship. This mentorship consisted of face-to-face meetings, paired</td>
<td>Not discussed.</td>
<td>Turnover rate (ratio of employees who voluntarily leave their position) for both newly</td>
<td>0% turnover from the 1st year of the program demonstrates that mentors can positively impact the turnover rate. After the 1st year the turnover rate for newly licensed RNs dropped from 31% to 10.3% and for all other RNs it dropped from 32% to 10.3%.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Education in Nursing, 41(7), 311-316.</th>
<th>Health Centers in Indiana.</th>
<th>schedules, reports, evaluations and meetings off-campus. Training for mentors was in depth and required.</th>
<th>licensed RNs and mentor RNs.</th>
<th>Mentors provide an additional layer of support and resources which lead to increased comfort for new nurses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Williams, F., Scott, E., Tyndall, D. &amp; Swanson, M. (2018). New nurse graduate residency mentoring: A retrospective cross-sectional research study. NURSING ECONOMICS, 36(3), 121-127.</td>
<td>Retrospective cross-sectional research study. Level 3. High Quality.</td>
<td>3,484 new graduate nurses from 102 hospitals in 24 hospital systems in 14 states. Mentors were assigned without compatibility assessment to those participating in The Versant RN residency program. Two evaluation surveys were used for all participants. $X^2$ was used to calculate probability. SPSS 24 was used to analyze descriptive and inferential statistics.</td>
<td>Not discussed.</td>
<td>Rate of intention to leave their job (collected by survey). 95.3% of those who had a 1:1 mentor had no/low intention to leave. 93.8% of those who participated in a group with one mentor had no/low intention to leave. Those who had a 1:1 mentor reported that the mentor was helpful to them in their transition to practice, professional development, and stress management.</td>
</tr>
<tr>
<td>Halfer, D., Graf, E. &amp; Sullivan, C. (2008). The organizational impact of a new graduate pediatric nurse mentoring program. NURSING ECONOMICS, 26(4), 243-249.</td>
<td>Descriptive study. Level 3. Moderate Quality.</td>
<td>270 bed Midwestern, urban, magnet facility specializing in pediatrics. 84 newly licensed nurses in the pre-implementation group. 212 newly licensed nurses in the post-implementation group. Comparison of two cohorts of new graduate nurses: one before and one after the implementation of an internship program that had a formal mentorship component</td>
<td>Not discussed.</td>
<td>Descriptive Survey. The job satisfaction tool was developed by the investigators and comprised demographic fill-in blanks, a Likert-type scale seeking degree of agreement for 21 statements and 4 open-ended questions. 1-year voluntary turnover was 12% average per class compared to the pre-implementation group’s rate of 20%. Improved job satisfaction was also reflected in a lower turnover rate that was sustained during the 2-year post-intervention study period. By lowering turnover rates, organizations avoid costs associated with recruitment, orientation, and temporary labor coverage or vacant RN positions. The implications are that there is a need for more longitudinal studies.</td>
</tr>
<tr>
<td>Cottingham, S., DiBartolo, M., Battistoni, S. &amp; Brown, T. (2011).</td>
<td>Pilot study. Level II. Moderate Quality (sample size)</td>
<td>21 mentor RNs, 19 protégé RNs at The Community Foundation of the Eastern Shore in Salisbury, Maryland (spread across 3 area hospitals).</td>
<td>Newly graduated RNs (protégés) were paired with experienced RN mentors during the protégé’s first year of work. Program consisted of a monthly gathering and educational seminar. Continuous professional development.</td>
<td>Not discussed.</td>
</tr>
<tr>
<td>Latham, C., Ringl, K. &amp; Mikel, H. (2011).</td>
<td>Quasi-experimental with pre/post tests. Level II, High Quality</td>
<td>89 newly licensed RNs &amp; 109 mentor RNs from 2 acute care hospitals in the southwest region over a 1-3 year time period.</td>
<td>Non-control group pre/post test design. Comparison of data was pre-intervention data. Mentees selected a mentor based off of profiles. Mentors attended 2 eight-hour courses learning necessary mentoring skills. Formal meetings and paired schedules for mentor/mentee. Relationship consisted of feedback/evaluations,</td>
<td>Not discussed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-randomized control study. Level 1. High Quality.</th>
<th>New graduate nurses (NGN) from with Bachelors degree. In 2013 the control group consisted of 199 NGNs. In 2014 the experimental group consisted of 239 NGNs. Tertiary general hospital located in China (3200 beds on 2 campuses). Data was analyzed using SPSS 22.0 and</th>
<th>NGNs recruited in 2013 (control group) were given a basic preceptorship. NGNs recruited in 2014 were included in a one-on-one mentorship program. Asynchronous comparison was used to avoid contamination between the two groups. PASS15.0 was used to calculate the sample size, differences between turnover rates, using a log-ran test. Mentorship lasted for one full year and activities included teaching, sponsoring, encouraging,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring Program</td>
<td>Frost, N., Nickolai, L., Desir, S. &amp; Fairchild, R. (2013). From our readers: How mentorship affects retention rates of new nurses. <em>American Nurse Today, 8</em>(4).</td>
<td>Tested using chi-squared.</td>
</tr>
<tr>
<td>Berezuk, S. (2010). Mentoring in emergency care: ‘Growing our own.’ <em>Emergency Nurse, 18</em>(7), 12-15.</td>
<td>Opinion paper/personal experience. Level 5. Low quality.</td>
<td>N/A</td>
</tr>
<tr>
<td>Malott, M. (2012). Building nursing capacity. <em>Canadian Journal of Nursing Leadership</em>. 89-98</td>
<td>Pilot study. Level II. Low Quality (reliability not discussed)</td>
<td>35-bed hospital in Iqaluit, Nunavut (arctic Canada). 26 RNs.</td>
</tr>
<tr>
<td></td>
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<td>One-on-one mentorship for the 1st 6 months. Mentors and protégés met once per week. Group mentoring was also incorporated once per month where one RN met with all protégés.</td>
</tr>
</tbody>
</table>
## Appendix D

### Summary of Systematic Reviews (SR)

<table>
<thead>
<tr>
<th>Citation</th>
<th>Quality Grade</th>
<th>Question/Aim</th>
<th>Search Strategy</th>
<th>Inclusion/Exclusion Criteria</th>
<th>Data Extraction and Analysis</th>
<th>Key Findings</th>
<th>Usefulness/Recommendation/Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen, C. &amp; Lou, M. (2013). The effectiveness and application of mentorship programmes for recently registered nurses: A systematic review. <em>Journal of Nursing Management, 22</em>, 433-442.</td>
<td>Level 1.</td>
<td>To conduct a systematic literature review and to examine the effectiveness and application of mentorship programmes for recently registered nurses.</td>
<td>Medline, Cochrane Library, CINAHL, PubMed and 2 international databases were used with the terms “mentorship, mentor, mentor experience, preceptor, skill development, nursing wisdom, recently registered nurse, new staff nurse, new graduate nurse, and novice nurse.”</td>
<td>Includes articles from 1999-2011. Original studies only. One-to-one programs only. Experimental and quasi-experimental studies only. Peer reviewed only. Excluded review articles and studies that have employed multiple nursing interventions.</td>
<td>144 studies reviewed by 2 authors and reached a consensus on all articles. Strength of evidence from various types of studies proposed by Newman and Roberts were adopted as the standard for critical appraisal. Finally, five studies were selected using EndNote.</td>
<td>The implementation of mentorship programmes reduced turnover rates, employee turnover costs and medical negligence rates. Job satisfaction and professional identity were improved.</td>
<td>Mentorship programmes are a beneficial process for mentors and recently registered nurses. They involve multi-dimensional teaching strategies and training courses and require long-term development.</td>
</tr>
<tr>
<td>Zhang, Y., Qian, Y., Wu, J., Wen, F. &amp; Zhang, Y. (2015). The effectiveness and</td>
<td>Level 1.</td>
<td>To evaluate the effectiveness of a mentoring program on the mentor, mentee,</td>
<td>The Cochrane Library, Medline, Ovid, Elsevier, Embase, CONAHL, CBM,</td>
<td>Includes studies in Chinese or English up until 2014. Inclusion of articles that targeted newly</td>
<td>146 study abstracts were reviewed by 2 reviewers. Full text review was</td>
<td>Turnover can be decreased through a mentoring program. Mentoring can enhance nursing</td>
<td>A successful mentoring program should include rigorous mentor selection.</td>
</tr>
<tr>
<td>Citation</td>
<td>Quality Grade</td>
<td>Question/Aim</td>
<td>Search Strategy</td>
<td>Inclusion/Exclusion Criteria</td>
<td>Data Extraction and Analysis</td>
<td>Key Findings</td>
<td>Usefulness/Recommendation/Implications</td>
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<tr>
<td>implementation of mentoring program for newly graduated nurses: A systematic review. Nurse Education Today, 37, 136-144.</td>
<td>Level 2</td>
<td>To identify best practices of formal new graduate nurse transition programs.</td>
<td>Literature search using PubMed, CINAHL, and Embase yielding 159 articles. Hand searching of reference lists</td>
<td>Terms used were “new nurse graduates, and those that contained sufficient detail about the mentorship program.”</td>
<td>done on remaining 36 articles. 9 articles included in review. Data was extracted using a standard data extraction checklist. All disagreements were discussed with a third review author. Meta-analysis was not done due to the lack of outcome measurements and because most studies were quasi-experimental.</td>
<td>New graduate education should focus on practical skill development, preceptors should receive a level of formal training. Potential barriers include time constraints and scheduling limitations. These should be taken into consideration before implementing.</td>
<td></td>
</tr>
<tr>
<td>Citation</td>
<td>Quality Grade</td>
<td>Question/Aim</td>
<td>Search Strategy</td>
<td>Inclusion/Exclusion Criteria</td>
<td>Data Extraction and Analysis</td>
<td>Key Findings</td>
<td>Usefulness/Recommendation/Implications</td>
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<tr>
<td>programs: An integrative review. <em>International Journal of Nursing Studies, 50</em>, 345-356.</td>
<td></td>
<td></td>
<td>from these papers was conducted also to ensure all relevant papers were included in the review, adding 4 additional papers.</td>
<td>Inclusion: empirical research, with abstract, targeted new grads, contained sufficient detail, and focused on acute care setting. Exclusion: programs geared toward pre-registration students, editorials, gray literature, residential, rural or community settings, specialty nursing areas.</td>
<td>according to four major themes.</td>
<td>new graduate nurse retention and cost benefits.</td>
<td>training, formal support should be available through the first 6-9 months. Opportunities for connection with peers should be offered and organizations should strive to ensure clinical units with healthy work environments.</td>
</tr>
</tbody>
</table>
## Appendix E

Levels of Evidence Grading and Descriptions

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Types of Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level I</strong></td>
<td>Experimental study, randomized controlled trial (RCT)</td>
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<tr>
<td></td>
<td>Systematic review of RCTs, with or without meta-analysis</td>
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<tr>
<td><strong>Level II</strong></td>
<td>Quasi-experimental Study</td>
</tr>
<tr>
<td></td>
<td>Systematic review of a combination of RCTs and quasi-experimental, or quasi-experimental studies only, with or without meta-analysis.</td>
</tr>
<tr>
<td><strong>Level III</strong></td>
<td>Non-experimental study</td>
</tr>
<tr>
<td></td>
<td>Systematic review of a combination of RCTs, quasi-experimental and non-experimental, or non-experimental studies only, with or without meta-analysis.</td>
</tr>
<tr>
<td></td>
<td>Qualitative study or systematic review, with or without meta-analysis</td>
</tr>
<tr>
<td><strong>Level IV</strong></td>
<td>Opinion of respected authorities and/or nationally recognized expert committees/consensus panels based on scientific evidence.</td>
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<tr>
<td></td>
<td>Includes:</td>
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<tr>
<td></td>
<td>- Clinical practice guidelines</td>
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<td>- Consensus panels</td>
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<tr>
<td><strong>Level V</strong></td>
<td>Based on experiential and non-research evidence.</td>
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<tr>
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<td>Includes:</td>
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<td>- Literature reviews</td>
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<td></td>
<td>- Quality improvement, program or financial evaluation</td>
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<tr>
<td></td>
<td>- Case reports</td>
</tr>
<tr>
<td></td>
<td>- Opinion of nationally recognized expert(s) based on experiential evidence</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level I</strong></td>
<td>Evidence from a systematic review or meta-analysis of all relevant RCTs (randomized controlled trial) or evidence-based clinical practice guidelines based on systematic reviews of RCTs or three or more RCTs of good quality that have similar results.</td>
</tr>
<tr>
<td><strong>Level II</strong></td>
<td>Evidence obtained from at least one well-designed RCT (e.g. large multi-site RCT).</td>
</tr>
<tr>
<td><strong>Level III</strong></td>
<td>Evidence obtained from well-designed controlled trials without randomization (i.e. quasi-experimental).</td>
</tr>
<tr>
<td><strong>Level IV</strong></td>
<td>Evidence from well-designed case-control or cohort studies.</td>
</tr>
<tr>
<td><strong>Level V</strong></td>
<td>Evidence from systematic reviews of descriptive and qualitative studies (meta-synthesis).</td>
</tr>
<tr>
<td><strong>Level VI</strong></td>
<td>Evidence from a single descriptive or qualitative study.</td>
</tr>
<tr>
<td><strong>Level VII</strong></td>
<td>Evidence from the opinion of authorities and/or reports of expert committees.</td>
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Appendix F

SWOT Analysis Chart

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<thead>
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<th>S</th>
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<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
<td><strong>Opportunities</strong></td>
<td><strong>Threats</strong></td>
</tr>
<tr>
<td>Membership within a large organization</td>
<td>Limited number of mentors among nursing staff</td>
<td>Lack of mentor program</td>
<td>possibility of new graduate acceptance into a residency program at six months</td>
</tr>
<tr>
<td>Established preceptor program</td>
<td>Short amount of time to implement project</td>
<td>Large number of new graduate nurses three times per year</td>
<td>Budget cuts within organization</td>
</tr>
<tr>
<td>Supportive executive team</td>
<td>Small budget</td>
<td>Large room for improvement in turnover rate</td>
<td>Decreased healthcare utilization related to the pandemic</td>
</tr>
<tr>
<td>Motivated hospital-wide educator</td>
<td>No available time for formal mentor training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diverse nursing team</td>
<td>Physical limitations due to current pandemic</td>
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</tbody>
</table>
Appendix G

Recruiting Flyer

Nursing Mentors

What does this mean?
This is different than being a preceptor. This is an intentional relationship with a newly licensed RN that you will be paired with.

- What is required of you?
- How long are you committed?
- What do you get out of it?

Intentionally build a relationship with your assigned NLRN
Hang out outside of work
Find out things you have in common – Get to know each other

6-week commitment
Work similar schedules on purpose
Meet weekly

Opportunity to be a leader on the unit
AppreciateU cash intermittently
Helping new employees feel comfortable and welcomed to the unit so they want to stay

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Appendix H Mentor Guide

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This mentoring program is designed to foster a mutual relationship between an experienced nurse (mentor) and a newly licensed nurse (mentee). It is intended to be a vehicle for expanding the mentee’s knowledge, caring, and confidence. The program is founded within the principles of adult learning.

Through this program, it is expected that the following objectives will be met:

- Develop supportive and encouraging environment
- Guide new nurses in their professional growth
- Promote collaboration and idea sharing

This guide contains guidelines, exercises, and tools that should be used to lead the mentor in the development of an effective relationship with the mentee(s).

This program was developed with hope that turnover among new graduate nurses can be reduced and eliminated. The turnover rate among newly licensed nurses within the first year is high. It is hoped that the program will facilitate an environment, post-transition from the student to the licensed role, and the realization of the responsibility that comes with nursing.

As a mentor, you will be tasked with helping to develop and teach skills necessary to be a successful practicing nurse. As the relationship progresses, you should see growth in these areas:

Interruption Skills
- Communication
- Feedback
- Assertiveness
- Service Standards
- Conflict Management
- Relationship Building
- Dealing with Difficult People

Management Skills
- Delegation
- Motivation
- Team Building
- Organization Culture
- Networking
- Self-Management
- Self-Care

Organizational Skills
- Project Management
- Goal Setting
- Time Management
### Mentor's Checklist

**Directions:** Read through the checklist, add additional items if appropriate, and check each item as you complete it.

1. Review the Mentor Guide.
2. Complete the Mentoring Self-Assessment.
3. Complete the "Remember When" exercise.
4. Meet with your mentee for the first time and obtain more information about them (resume, job history, family, interests, etc.).
5. Working with your mentor, fill out the Mentoring Program Plan. Remember that your MLE's input is the best when they can apply their learning in real situations.
6. Schedule future meetings with your mentee and encourage them to come prepared with topics they wish to discuss.
7. At 6-weeks encourage your mentee to fill out the job satisfaction survey they receive in their email.
8. 1st Meeting
9. 2nd Meeting
10. 3rd Meeting
11. 4th Meeting
12. 5th Meeting
13. Towards the end of the 6-week mentor relationship confer with your mentee about their new role, interest to stay on the job, goals for the next year, and their overall satisfaction with the program.
14. 15. 16. 17. 18.

---

#### Tips for Success

- Be comfortable with the uncertainty of this type of a new relationship.
- Present the mentoring relationship as a growth and development opportunity. Use adult learning principles.
- Exhibit exemplary/moral model behavior.
- Be interested. Don’t appear rushed.
- Be clear about the necessity of meeting on a regular basis, even if your mentee doesn’t appear to have any issues, problems, or development needs. Expect your mentee to actively participate.
- Make appointments in advance and keep them.
- Meet in an environment where there will be few, if any, interruptions.
- Introduce your mentor to coworkers, physicians, and other significant individuals.
- Offer guidance in the customs/culture of the unit/organization.
- Remember, it is the consistent interest, friendliness, and quality time that builds a relationship of trust, wherein positive development occurs.
- Publicly praise your mentor’s accomplishments and abilities.
- Recognize and encourage potential.
- Provide support in times of personal crises or problems.
- Monitor your mentor’s progress.
- Assist in making decisions through listening, support, and feedback.
- As a novice, provide specific direction to the mentor as needed. Allow and encourage independence when ready, while continuing to provide the proper amount of guidance.
- Share appropriate life experiences to personalize and enrich the mentoring experience. Describing mistakes made in a humorous way can be especially helpful ("You wouldn’t believe what I did..."").
- Encourage the mentor to take risks and learn from mistakes.
- Agree to a no-fault termination of the relationship if it isn’t working or when the time is right.
**MENTORING PROGRAM**

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### CENTURA HEALTH

#### “REMEMBER WHEN” EXERCISE

Immediate. Answer the following questions to help you remember, from your own experience, what it was like when you were a new nurse:

1. When you first became a nurse, what was difficult for you?

2. What uses some of your heart?

3. Can you remember someone who was helpful to you?

4. What did that person do that was helpful to you?

5. What strengths did you possess at that time that helped you?

6. What motivates you now to stay in nursing?

---

### CENTURA HEALTH

#### GUIDELINES FOR MEETING

The purpose of the meetings with your mentee is to provide an environment of open communication where you can discuss any and all aspects of your mentor’s repertoire to a new position. Encourage your mentee to make the most of these meetings by sharing their thoughts, issues, and questions. The following guidelines will assist you in making your mentoring experience beneficial to you and your mentee.

#### Meeting Topics

The following are topics you and your mentee may discuss during your meetings. Your mentor’s immediate needs for the next few weeks/months. The current demands of your mentor’s work. Feedback received from others (something that went wrong recently, something that went very well that you mentor should utilize often). Short-term goals, long-term goals. Questions, concerns, issues, wishes.

#### Tips for the First Meeting

You will be establishing the tone of the relationship in this first meeting. Remember that the mentor will be uncertain and may feel intimidated prior to meeting you:

- Be friendly, welcoming, encouraging, and encouraging. Ask about the mentor’s experiences of the first weeks/months. Share something from your first weeks/months as a new nurse. Explain why you are meeting this time as a mentor. Encourage your mentor to ask questions about the mentoring program. Renew your mentor’s confidence/variability in forming appointments, discuss locations and times to meet that appeal to both of you (i.e., walk outside, lunch, etc.) with what’s comfortable. Ask them to review the confidential basis of the mentoring relationship.

#### Subsequent Meetings

Begin by reappraising developing the relationship aspects further (i.e., how has it been going, share something about yourself, etc.). Review the mentoring program’s expectations and other feedback and guidance. Engage some of the following points if your mentor is having difficulty in terminating the meeting agenda. What kind of experiences have you had in a mentoring position? Have you had a mentor before? Have you had any ideal role models? How did your mentor/nurse mentors help you? What specific behaviors of your role model did you like? What did you find easy to emulate? What did you find that you wanted to emulate but have not been able to do? What gets in your way? What would help you implement your wishes? Share some challenges you’ve had and describe how you handled them.

---

### CENTURA HEALTH

#### MENTORING PLAN

The purpose of this plan is to set and provide continued direction for the progress of this mentoring program. The plan is developed collaboratively by the mentor and mentee. The mentor’s self-assessment results should be used as baseline data to determine the mentor’s learning needs. This tool serves as a guide to develop goals and expectations, and a method for communication. Complete your responses to each of the sections.

#### GOALS:

What do you both want to achieve with this mentoring program?

What do you want your outcomes to be?

#### EXPECTATIONS:

What are your expectations of each other? (Refer to the Introduction to the mentoring Article for assistance in developing expectations.)

I expect my mentor to...

I expect my mentee to...

#### COMMUNICATION AGREEMENT:

By what method(s) and how often will you communicate with each other?

#### EVALUATION:

Determine periodic points at which you will discuss the progress of the mentoring program and the relationship. Develop future actions and renegotiate this plan as needed.

---

### CENTURA HEALTH

#### MENTORING MEETINGS

This tool may be used by the mentors to create an agenda for meetings with the mentee.

1. Goals for This Meeting

2. Topics/Issues to Discuss

3. Accomplishments During This Meeting

4. Tentative Goals for Next Meeting

5. Other

6. Next Meeting Date and Time
Academy of Medical Surgical Nurses (2012). AMSN mentoring program. Mentor guide [pdf].

## Appendix I
### Project Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>NUR7801</th>
<th>NUR7802</th>
<th>NUR7803</th>
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<tr>
<td>Meet with director of quality</td>
<td>Week 1</td>
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<tr>
<td>Develop Project Proposal</td>
<td>Week 3</td>
<td>Week 5</td>
<td>Week 9</td>
</tr>
<tr>
<td>Develop mentor training</td>
<td>Week 7</td>
<td>Week 11</td>
<td>Week 13</td>
</tr>
<tr>
<td>Meet with educators</td>
<td>Week 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seek admin approval</td>
<td>Week 1</td>
<td>Week 3</td>
<td>Week 5</td>
</tr>
<tr>
<td>Seek EBPC approval</td>
<td>Week 7</td>
<td>Week 9</td>
<td>Week 11</td>
</tr>
<tr>
<td>In-person training with mentors</td>
<td>Week 13</td>
<td>Week 15</td>
<td></td>
</tr>
<tr>
<td>Present to Admin Council and unit leadership</td>
<td></td>
<td></td>
<td>Week 7</td>
</tr>
<tr>
<td>Program Maintenance (check-ins with mentors and protégés)</td>
<td></td>
<td></td>
<td>Week 9</td>
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<tr>
<td>Check-In with Preceptor</td>
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<td>Week 11</td>
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<tr>
<td>Final Survey</td>
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<td>Week 13</td>
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<tr>
<td>Collect data</td>
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<td>Compare outcomes</td>
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<td>Evaluation and Dissemination</td>
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Appendix J

GANNT Chart
## Appendix K

### Survey Questions

**Final Survey Questions - Mentee**

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<th>Question</th>
<th>Answer Type</th>
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<tr>
<td>1</td>
<td>Do you intend to continue working on Acute Care beyond 12 months from your hire date?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2</td>
<td>Do you intend to continue working on Acute Care beyond 18 months from your hire date?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>3</td>
<td>Has your mentor had an impact on your intention to stay or leave?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>4</td>
<td>What factors have influenced your decision to stay or leave?</td>
<td>Comment</td>
</tr>
<tr>
<td>5</td>
<td>Would you recommend the mentor program to continue for future NLRNs?</td>
<td>Comment</td>
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**Final Survey Questions - Mentor**

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<th>Answer Type</th>
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<td>Do you intend to continue working on Acute Care for the next 12 months?</td>
<td>Yes/No</td>
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<td>2</td>
<td>On a scale of 1-10 how would you rate your job satisfaction?</td>
<td>1-10</td>
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<tr>
<td>3</td>
<td>Has your participation as a mentor influenced your job satisfaction positively?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>4</td>
<td>What factors have influenced your decision to stay or leave?</td>
<td>Comment</td>
</tr>
<tr>
<td>5</td>
<td>Would you recommend the mentor program to continue for future NLRNs?</td>
<td>Comment</td>
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Appendix L

Mentor Survey

**Frequency Table for Nominal and Ordinal Variables**

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<td>Has_the_Mentorship_impacted_you_positively</td>
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*Note.* Due to rounding errors, percentages may not equal 100%.

Mentor job satisfaction

**Summary Statistics Table for Interval and Ratio Variables**

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<th>Min</th>
<th>Max</th>
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Mentee Survey

**Frequency Table for Ordinal Variables**

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### Intention_to_work_past_12_months
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*Note. Due to rounding errors, percentages may not equal 100%.*