

New Graduate Nurse Transition Programs

A Meta-Review

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Abstract

Objective: The purpose of this study was to improve understanding of the current state of new graduate nurse transition programs (TP) or nurse residency programs (NRP), to identify best practices, and to ascertain the characteristics of TP/NRPs currently in use. Additionally, to identify critical success factors and determine if there is a preferred model.

Design: A systematic analysis of systematic analyses of TP/NRPs (2000-2015). All studies involved graduated nurses with less than 1 years' experience. There are 8 meta-analysis studies with 177 individual articles included.

Data Sources: Medline/PubMed (NLM), Health Reference Center Academic (Gale), ProQuest Nursing & Allied Health Source, ABI/INFORM Dateline, ABI/INFORM Trade & Industry, Science Direct Journals (Elsevier), ERIC (U.S. Dept. of Education), Springer Link, Springer (CrossRef), and Wiley (CrossRef), Wiley Online Library.

Review method: The review method is based on Harrison Cooper's 7 step research synthesis and meta-analysis model. 1) problem formulation; 2) searching the literature 3) data collection; 4) evaluation the quality of the studies; 5) analysis and integration of the outcomes of the studies; 6) interpreting the evidence; and 7) presentation of results.

Results: Studies focused on new graduates with less than a year of experience but failed to distinguish between levels of nurses' education, e.g., ADN, Diploma or BSN. Most studies relied upon convenience samples, with a lack of experimental designs and a heavy reliance on single group cohorts. The NRPs researched employed a variety of objectives, content and tools and varied the educational training-period with no clear indication of which program template may be most effective.

Conclusions: A synthesis of evidence from the eight studies reviewed provided significant evidence of the benefits of NRPs to new graduate nurses. However, it is important to acknowledge that measures and conceptualizations of some of these outcomes may overlap. The failure to clearly define outcomes, and the heterogeneity of conceptual definitions assigned to the outcomes, can confound conclusions drawn about how NRPs support the professional growth of newly graduated nurses. Before any sound decisions can be made about the integration of NRPs, or changes to the designs of such programs, it is essential that confounding or moderating factors are controlled to better understand what elements may drive the positive results that policymakers desire. While there has been a lot of research on this topic it has been of the scatter-shot variety, without a focus on determining best-practices and subsequent formulation of a model to implement those practices. The need for continued research is apparent, as is the need

to drive the process from a national group with the stature and wherewithal to oversee and finance this process.

Key words: Nurse residency program, evidence-based transitional programs, critical thinking and nursing orientation, nursing orientation and return on investment, retention, nurse transitional program and job satisfaction, nurse residency programs.

Background

Although every graduate of an accredited nursing program, who is licensed as a registered nurse, has had extensive undergraduate training they are not prepared to start taking care of patients when they are hired into an acute care facility (Ebright, Patterson, Chalko, Render, 2003). In their work, Berkow, Virkstis, Stewart, & Conway (2008) found that 90% of the educators responsible for the academic undergraduate education of nursing students, believe that their students are prepared at completion of their nursing school education to step into an RN role and provide effective patient-care, while just 10% of hospital administrators felt that was true.

Hospitals are a complex environment with ever increasing patient acuity and shorter lengths of stay each year. The Institute of Medicine (*IOM*) (1999, 2000) report, “To Err is Human”, encouraged the review of novice nurse training to determine if it was providing staff with the skills to perform in this highly complex work environment. What has been established is that even the best nursing baccalaureate programs are not able to completely prepare their graduates to work in this environment, related to the increasing complexity of patient care (Goode, Lynn, Krsek, & Bednash, 2009; Goode, Lynn, McElroy, Bednash, & Murray, 2013). The transition of newly graduated nurses from the relative safety of nursing school to the challenging reality of the work environment has been a focus of both academic and clinical enterprises for over thirty years (Krugman et al., 2006). The transition has been described as a, “disturbing discrepancy between what they understand from their education to what they experience in the “real” world of healthcare service and it leaves them with a sense of groundlessness” (Boychuk-Duchscher, 2009 p. 1104). What was recognized, decades ago, by Kramer (1974), is that the transition from student-nurse to staff-nurse is a stressful endeavor or as she states a *reality shock*. Stress can affect the new-graduates’ retention of knowledge and capability for learning, which may negatively impact patient safety and quality of care. Consequently, “excessive and unchecked stress can influence the level of job satisfaction and lead to the early departure of promising staff” (Altier & Krsek, 2006, p. 70).

One of the primary recommended methods for training staff (IOM, NCSBN, UHC/AACN, NHS) is the use of the preceptor model, Smith and Crawford (2004) found that 80.6 % of registered nursing staff were trained using this model. The preceptor can play a key role in the transition of the new graduate through role modeling and helping to further develop clinical skills. This model is also mandated in the UK and was studied by Panzavecchia & Pearce (2014) for effectiveness. They found there are minimal requirements to become a preceptor and the preceptors themselves felt stressed out because they were not consistently given tools to be successful nor provided a decreased patient load that would allow them to spend time teaching. Parker, Giles, Lantry, & McMillan (2014) describe a negative workplace culture with frequent episodes of horizontal violence which is consistent with other studies over the past 10 years (p. 155). This may result in an ineffective orientation and new graduates indicate that 40% to 50%

of the time they are dissatisfied with the preceptor they have been assigned (Parker, Giles, Lantry, & McMillan, 2014).

Transition Programs

Organizations that want to improve both quality of care and retention of staff have been in search of a way to provide post-graduate training or orientation for at least sixty years. A program that has shown promise in decreasing stress, and turnover, while improving skills is a nurse residency program. The Institute of Medicine and the National Council of State Boards of Nursing (NCSBN) recommend that new-graduates be trained using a NRP. The NRP has been defined by the IOM in their *Report on the Future of Nursing (2011)* as “planned, comprehensive period during which nursing graduates can acquire the knowledge and skills to deliver safe, quality care that meets defined (organizations or professional society) standards of practice” (p. 120-121).

Methodology

The review method for this research is based on Harrison Cooper’s 7 step research synthesis and meta-analysis model: 1) problem formulation; 2) searching the literature 3) data collection; 4) evaluation the quality of the studies; 5) analysis and integration of the outcomes of the studies; 6) interpreting the evidence; and 7) presentation of results.

Problem Formulation

The purpose of this study was to improve understanding of the current state of NRP, to identify best practices, to ascertain the characteristics of NRPs currently in use and additionally, to identify critical success factors and determine if a preferred model existed for transitional programs.

Searching the Literature

The initial search strategy was a review of documents for nursing orientation on Google scholar. This resulted in 991,000 titles. A review of this list indicated specific key words, using these key-words, a search of databases resulted in 126 articles for further review. The databases searched: Medline/PubMed (NLM), Health Reference Center Academic (Gale), ProQuest Nursing & Allied Health Source, ABI/INFORM Dateline, ABI/INFORM Trade & Industry, Science Direct Journals (Elsevier), ERIC (U.S. Dept. of Education), Springer Link, Springer (CrossRef), and Wiley (CrossRef), Wiley Online Library. Flow Chart: DOI: <http://dx.doi.org/10.17632/phzxst65jr.1>

Data Collection

Studies were included in this review if their described purpose clearly focused on evaluating NRPs. Studies were included even if the focus was on narrow elements or outcomes of NRPs: education, clinical leadership skills, or job satisfaction. Only studies published after 2000 were included. Articles were reviewed to determine if they met the following criteria: (a) provided a complete list of databases searched, (b) included a complete list of articles, (c) furnished a complete list of instruments included in original studies, (d) presented a clear discussion of studies and outcomes, (e) clearly defined inclusion and/or exclusion criteria, (f) if their described purpose was clearly focused on evaluating NRPs. If a study included the last

year of nursing school or last semester students, it was excluded. Studies included clearly indicate that their aim is a focus on new graduate nurses.

Evaluation of the Quality of the Studies

AMSTAR (A Measurement Tool to Assess Systematic Reviews) was used to score each of the studies. The rating scale for AMSTR is: low quality (AMSTAR score 0-4), moderate quality (AMSTAR score 5-8), and high quality (AMSTAR score 9-11). Scores from the 8 articles are listed in Table 1:

Table 1: *AMSTAR Scores of Included Studies*

Study	AMSTAR Score
Letorneau & Fater, 2015	5
Anderson, Hair, & Todero, 2012	7
Rush, Adamack, Gordon, Lilly, & Janke, 2013	9
Lin, Viscardi, & McHugh, 2014	8
Chappell & Richards, 2015	8
Al-Dossary, Kitsantas, & Maddox, 2014	8
Edwards, Hawker, Carrier, & Rees, 2015	9
Missen, McKenna, & Beauchamp, 2014	10

Analysis and Integration of the Outcomes of the Studies

A review of the of the literature, provided studies with different aims, different tools to measure outcomes, varying lengths of programs and differing names for similar programs. As the literature review progressed a pattern developed showing consistent themes as well as measurement tools repeatedly utilized. It also became clear that others had pursued similar research and those authors had determined that there was enough similarity within studies that a meta-analysis was appropriate rather than providing another single research study. To better understand the content, across the reviewed studies, a table was created, by author, to assess the purpose, research questions asked, design of studies, number of studies, curriculum and program length can be found at DOI: <http://dx.doi.org/10.17632/phzxst65jr.1#file-07950b5a-89b8-4a7c-8b0c-0aff228f391e>.

Interpreting the Evidence

While ample evidence supports the use of NRPs to foster a variety of positive outcomes for newly graduated nurses, it is important to acknowledge that measures and conceptualizations of some of these outcomes may overlap. For example, improved autonomy and improved clinical competence may be defined very similarly, but listed as separate outcomes, by different authors. Failure to clearly define outcomes, and the heterogeneity of conceptual definitions assigned to the outcomes, can confound conclusions drawn about how NRPs support the professional outcomes of newly graduated nurses.

Common areas of improved outcomes were found across these investigations, a list of the studies correlated with each of these outcomes is provided in Table 3 located at DOI: <http://dx.doi.org/10.17632/phzxst65jr.1#file-07950b5a-89b8-4a7c-8b0c-0aff228f391e>.

Using this table along with a review of abstracts, first, and then full text, the authors narrowed the number of articles to the eight meta-analysis studies included here. There were several studies that had a broader definition of new graduate training, within the 177 articles included, reviewing not only NRPs but all transitional programs, presuming that home-grown programs have many of the same features of a NRP but do not utilize that naming convention. Additionally, no distinction is drawn between research looking for a specific outcome and those studies reporting on general outcomes attained by a specific transitional program.

Design

Research design is a problem across almost all the studies included. There was a lack of experimental designs (Lin, Viscardi, & McHugh, 2014) and heavy reliance on single group cohorts. Rush, Adamack, Gordon, Lilly, & Janke (2013) criticized the methodological choices of current NRP literature, explaining that “Few studies had designs with the degree of control necessary to rule out competing explanations” (p. 353). Missen, McKenna, & Beauchamp (2014) explained that study heterogeneity and poor methodological quality prevented a precise calculation of the job satisfaction and confidence outcomes from NRP participation.

Types of Programs

A variety of programs were included in the studies that comprised the eight meta-analyses used for this investigation, including simulation, preceptorships, mentorship, reflexive practice, educational sessions, community learning, and distance learning.

Program Duration

The duration of NRPs reviewed and referenced in this analysis ranged significantly. While many studies indicated that programs of at least 1 year seemed to provide the most positive outcomes, failure to control for other variables, along with heterogeneity across studies, prevents the formulation of more detailed conclusions.

Diverse Regions

Regional differences also created barriers in the analysis of the eight studies included in this review. For example, geographic variations in how outcomes, such as turnover and retention were measured, limited an understanding of how NRPs may affect new graduate nurses’ outcomes in different locations.

Theoretical Models

Anderson, Hair, Todero (2012) pointed out major issues in current research on NRPs, which was the lack of consistent or clearly-defined theoretical frameworks that guided the development and implementation of NRPs: “Why particular content/variables are selected for teaching and evaluation and how they match the measurement tools should be based on theory” (p. 210).

Inconsistent Variables/Definitions for Key Variables

Across the programs studied, there was a lack of consistency in terms of program details/replicability, and the qualification and preparation of personnel leading the programs (Anderson et al., 2012). Edwards et al. (2015) provide an example of how inconsistencies in the

definitions of variables and outcomes confounded conclusions on the relationships between NRPs and outcomes: “When investigating retention, researchers need to measure retention rates attributed to the intervention and not just retention rates for the hospital in general in the year that the intervention was conducted” (p. 1268).

Settings

As Al-Dossary, Kitsantas, & Maddox (2014) pointed out, a challenge to determining the best NRP program strategies relates to the dynamic state of nursing, which is always changing, is based on complex healthcare systems and patient needs. Inconsistency in the nursing settings examined represents another issue with the current research on NRP program development and outcomes. Some of the studies focused on multi-site facilities, while others focused on single site facilities.

Confounding Variables

Another possible problem with the systematic reviews included in this meta-analysis is confounding variables. For example, Letouneau and Fater (2015) pointed out that many studies included in their reviews were related to reduced nurse turnover at year 1; however, few studies consider how other common causes of turnover (such as organizational culture and organizational leadership) may moderate the relationships between NRPs and the retention of newly graduated nurses. Without assessing for these common turnover predictors, it is difficult to determine the degree to which retention was actually the result of NRP participation. Anderson et al. (2012) postulated that some reliable tools to assess important factors related to NRP success (such as critical thinking and knowledge application) do not exist. A complete review of the findings from the eight studies can be found at: DOI: <http://dx.doi.org/10.17632/5t67f59p4t.1>

Table 4, DOI: <http://dx.doi.org/10.17632/phzxst65jr.1#file-07950b5a-89b8-4a7c-8b0c-0aff228f391e>, provides a list of the instruments referenced in each of the eight reviews included in this investigation. There are ninety tools listed here and when duplicates are removed fifty-one separate tools remain.

Discussion

Six of the eight studies were of high quality and the other two graded out as moderate providing substance to the belief that NRPs are a valuable tool for training new RN graduates. Unfortunately, based on this research the constituent parts of the training remain in doubt as does the recommendation by NCSBN to license all new graduates for one-year and require participation in a one-year NRP prior to receiving further licensure. While there are positive results from the studies the wide variety of study design, tools utilized, aims identified, convenience sampling and sample sizes make it impossible to draw definitive conclusions. The variability of the study designs and subsequent results leave the door open that results could be attributed to other explanations.

There is strong support to mandate the use of a preceptor for training new graduates, despite the evidence found in literature demonstrating that new graduates, 40% to 50% of the time, are dissatisfied with the preceptor they have been assigned (Parker et al., 2014). There are many reasons that this may occur: lack of training, inconsistent preceptors or preceptor burn out to name a few. Many of the studies emphasized the need to train this group of staff but none of them looked at alternate forms of providing equivalent support in lieu of trained experienced

preceptors. In addition, none of the articles addressed organizations with high turn-over and the loss of the most experienced staff except to note that NRPs have a positive impact on retaining RNs. The loss of experienced staff directly impacts an organizations ability to provide multiple new grads with an effective preceptor. This lack of experienced staff can be, somewhat, mitigated by providing nurse educators/coordinators that are accessible and available to the new graduate (Parker, et al., 2014). The recommendation by the NCSBN is perhaps an ideal to strive toward, since preceptorship, when done correctly, planned, coached and supported by training, can be highly effective.

Retention was almost universally addressed in the articles found in this study, however, there was minimal discussion on how retention rates looked over time. It is unusual for staff to leave a position while they are in orientation so those programs that used a 1-year model with minimal turnover should have, ideally, had low rates. Edwards et al., (2015) indicate in their study on NRPs that intent to leave was lower in 12-month programs but by 12 to 18 months there was no significant difference in turnover. With high turnover rates reported nationally in the first and second year there may be a need to better understand what is driving that turnover. It is possible that orientation plays a role, but equally feasible that rates of pay, benefits, location or other factors play an important role.

The NCSBN conducted one of the largest studies on NRPs and transition to practice, publishing the results in 2015. They used an experimental design with a control and experimental group. Their experimental group imbedded what they list as 11 evidenced-based tools into their program. The eleven practices are: 1 Orientation to the organization as a whole, 2 Institutional support throughout the first 12 months of practice, 3 Opportunities for feedback and reflection, 4 Trained preceptors, 5 Patient-centered care, 6 Communication and teamwork, 7 Evidence-based practice, 8 Quality improvement, 9 Informatics, 10 Patient safety and 11 Clinical reasoning. The results were not surprising in light of what has been laid out in this research study, however, they were surprising to the team performing the study. Spector et al., (2015) states: “Though both [experimental and control] groups had statistically significant improvements over time, there were few significant findings when comparing the [experimental] group to the control group” (p. 32). When the researchers dug more deeply into their results they found that they could further break the control group into two sub-groups. The first they labeled as *established* programs, that is a program that had 6 or more of the 11 evidenced-based criteria the researchers had employed in their own experimental group. The second was labeled *limited*, these hospitals had 5 of the criteria or less or no formal transition program at all. The established programs scored the best overall, slightly, better than the experimental NRP. Of continued concern is that in this study the two better performing groups TPP and Established still had a turnover rate of 14.7% and 12% respectively (Spector et al., 2015).

Future Research Recommendations

There are many positive aspects of NRPs and future research should be done comparing these features against one another with controlled studies to determine which have a consistent impact on nurse driven indicators. Funding for these studies, employing some of the strategies expressed by the researchers in the papers represented here, should be granted by either AHRQ and/or perhaps the states of California, Texas and Florida. These three states face the largest shortfall of nurses today and will be significantly impacted in the future by the on-going shortage. Juraschek, Zhang, Ranganathan and Lin (2012) looked at how well all states currently met the needs of their population related to the number of nurses per population. In 2009 Florida

had a grade of C, Texas C- and California a D. All three were projected to drop that grade to an F based on projections of nurse per patient population in 2030. While there are other states that grade just as poorly, these three represent a nursing deficit of 431,243, by far the largest for the USA. It should also be noted that while the majority of research on NRPs comes from the USA, there are articles included in this research from Canada, UK, Thailand, New Zealand, Australia, Scotland and Wales with the same issues plaguing each of them and searching for appropriate solutions. This may be another source of funding and research talent to explore.

Researchers should utilize groups of like sized cohorts but vary the length of the program, content and outcomes studied, minimally. If schools of nursing became involved they could provide the neutral party needed to allow these studies to take place within communities where acute-care facilities compete for both patients and staff and provide both the expertise and manpower required to complete this type of detailed, extensive work. The involvement of AHRQ would allow the work to be coordinated at a national level to control the different trials, aims sought, tools utilized and calculation of outcomes. One model to look to for similar work is that of the Educators that came together after the IOM report in 2000. This group of educators created the Quality and Safety Education for Nurses (QSEN). Perhaps a similar process could be put in place for residency programs. The QSEN model was meant to level the field on what was taught in the undergraduate program and then built upon by hospitals. While this is still in the spreading phase, the website and modules available to all which is an important tool to drive consistency in education.

There should be specific carve outs for rural and critical access hospitals as well as non-hospital settings. If possible more detailed demographic data on each organization should be gathered. This should include size, turnover for nurses, rates of pay (both for new graduates as well as max-out rates or highest rates of pay per category of RN, e.g. staff, charge or manager). Additionally, each programs' educational structure should be collected, including but not limited to: type of program, length of program, use of educator, preceptor, content taught, hours spent in patient care, off-unit training and didactic training. Other tools used such as use of simulation, computer training, virtual training and content should be tracked. Indication of whether preceptors are given any training, if classes are taught the background and training of the person presenting the material. Finally, in they do not use preceptors what or who, if anyone, fills the role.

We have also shown the impact of the large number of tools used within studies. It will be important to determine which tool(s) is most effective to measure outcomes. That will be driven by the aims of the transitional programs. As was demonstrated here, if the intent is to promote specific skills like leadership, job-satisfaction or competency these are different than satisfaction, turnover or anxiety. Lastly, there should be a focus on those aspects of training that have the greatest impact on nurse driven indicators such as medication errors, pressure ulcers or patient falls.

Conclusion

Structured NRPs hold much promise for improving the quality of care provided within acute care hospital settings. There is an impressive list of positive aspects demonstrated in many individual studies. An outlier to these findings came from the Al-Dossary et al. (2014) study which had as one of its studies the Roud, Giddings, Koziol-McClain (2005) which found no significant relationship between residency programs and nurse outcomes. There remains no

clear guideline or curriculum that has been shown to be “The” evidenced-based solution to what continues to be a major issue for healthcare: the educational process of transitioning RNs from their academic training to an effective, safe bedside nurse. Programs vary by aim, length, outcomes pursued, teaching elements and resources available to the new graduate. While turnover has been positively impacted by the use of a NRP there must be some acknowledgment that competition among facilities, with large variance in wage, benefits and opportunities, plays a role in turnover both for new staff and experienced staff and this has a direct impact on the quality of care and the organizations ability to provide experienced staff to train new nurses.

Summary

The purpose of this study was to improve understanding of the current state of NRPs, to identify best practices, and to ascertain the characteristics of NRPs currently in use. In addition, the researchers sought to identify critical success factors and determine if a preferred model existed for transitional programs. The study was guided by three questions: (a) does research support the use of transition programs as an effective training method for post-graduate nursing education; (b) what are the critical success factors related to transition to practice programs; and (c) how do the critical success factors explain the common core elements of transition programs. A synthesis of evidence from the eight studies reviewed in this paper provided significant evidence of the benefits of NRPs to new graduate nurses. The failure to clearly define outcomes, and the heterogeneity of conceptual definitions assigned to the outcomes, can confound conclusions drawn about how NRPs support the professional outcomes of newly graduated nurses.

Regarding the second research question, critical success factors of NRPs may include program duration (Chappell & Richards, 2015; Letourneau et al., 2015; Lin et al., 2014), the education/training of program facilitators, experiential learning (Al-Dossary et al., 2014), the use of mentors/preceptors (Al-Dossary et al., 2014; Edwards et al., 2015), positive clinical learning environments (Anderson et al., 2012), structured colleague/organizational support (Edwards et al., 2015), and positive workplace settings (Lin et al., 2014). Finally, due to issues associated with the studies included in this review, it is not possible to draw strong conclusions about the relationship between the critical success factors and core elements of NRPs, as required for the third research question. Several limitations of studies included in this review were detailed, including instrumentation, sample, design, program types, program duration, regional location, theoretical models, inconsistent variables, settings, and failure to account for potential confounding variables.

References

1. Ebright, P. R., Patterson, E. S., Chalko, B. A., & Render, M. L. (2003). Understanding the Complexity of Registered Nurse Work in Acute Care Settings. *Journal of Nursing Administration*, 33(12), 630-638.
2. Berkow, S., Virkstis, K., Stewart, J., & Conway, L. (2008). Assessing New Graduate Nurse Performance. *Journal of Nursing Administration*, 38(11), 468-474. <http://dx.doi.org>
3. *To Err is Human: Building a safer health system*. (2000). Washington D.C: National Academy Press.
4. Goode, C. J., Lynn, M. R., Krsek, C., & Bednash, G. D. (2009). Nurse Residency Programs: An Essential Requirement for Nursing. *Nursing Economics*, 27, 142-147, 159.

5. Goode, C., 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. *Journal of Nursing Administration*, 43(2), 73-79.
6. Krugman, M., Bretschneider, J., Horn, P., Krsek, C., Moutafis, R., & Smith, M. (2006). The national post-baccalaureate graduate nurse residency program. *Journal for Nurses in Staff Development*, 22(4), 196-205.
7. Boychuk-Duchscher, J. E. (2009). Transition shock: the initial stage of role adaptation for newly graduated Registered Nurses. *Journal of Advanced Nursing*, 65(5), 1103-1113. <http://dx.doi.org/10.1111/j.1365-2648.2008.04898.x>
8. Kramer, M. (1974). In *Why nurses leave nursing*. St. Louis, MO: Mosby.
9. Altier, M. E., & Krsek, C. A. (2006). Effects of a 1-year Residency Program on Job Satisfaction and New-graduate Nurses. *Journal for Nurses in Staff Development*, 22(2), 70-77.
10. Smith, J., & Crawford, L. (2004). *Report of findings from the 2003 employer survey* [Special issue]. *NCSBN Research Brief*, 14. Retrieved from <https://www.ncsbn.org/4235.htm>
11. Panzavecchia, L & Pearce, R. (2014). Are preceptors adequately prepared for their role in supporting newly qualified staff? *Nurse Education Today*, 34(7), 1119-1124.
12. Parker, V., Giles, M., Lantry, G., & McMillan, M. (2014). New graduate nurses' experiences in their first year of practice. *Nurse Education Today*, 34(1), 150-156. doi:10.1016/j.nedt.2012.07.003
13. The Future of Nursing: Focus on Education. (2010). Retrieved from <http://iom.nationalacademies.org/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Report-Brief-Education.aspx?page=1>
14. Lin, P. S., Viscardi, M. K., & McHugh, M. D. (2014, October 3, 2014). Factors influencing job satisfaction of new graduate nurses participating in nurse residency programs: A systematic review. *The Journal of Continuing Education in Nursing*, 45(10), 439-450.
15. Rush, K. L., Adamack, M., Gordon, J., Lilly, M., & Janke, R. (2013). Best practices of formal new graduate nurse transition programs: An integrative review. *International Journal of Nursing Studies*, 50, 345-356.
16. Missen, K., McKenna, L., & Beauchamp, A. (May 15, 2014). Satisfaction of newly graduated nurses enrolled in transition-to practice programmes in their first year of employment: a systematic review. *Journal of Advanced Nursing*, 11, 2419-2433.
17. Anderson, G., Hair, C., & Todero, C. (2012). Nurse Residency Programs: An Evidenced-Based Review of Theory, Process and Outcomes. *Journal of Professional Nursing*, 28, 203-212.
18. Edwards, D., Hawker, C., Carrier, J., & Rees, C. (2015). A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. *International Journal of Nursing Studies*, 52, 1254-1268. doi: 10.1016/j.ijnurstu.2015.03.007

19. 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*, 1024-1028.
20. Letourneau, R. M., & Fater, K. H. (2015). Nurse residency programs: An integrative review Of the literature. *Nursing Education perspectives, 36*(2), 96-101. doi:10.5480/13-1229
21. Spector, N., Blegen, M. A., Silvestre, J., Barnsteiner, J., Lynn, M. R., Ulrich, B., & Alexander M. (2015). Transition to practice study in hospital settings. *Journal of Nursing Regulation, 5*(4), 24Y38.
22. Juraschek, S. P., Zhang, X., . Ranganathan, V. K., & Lin, V. W. (2012). United States Registered Nurse Workforce Report Card and Shortage Forecast. *American Journal of Medical Quality, 27*(3), 241-249.
23. Roud, D., Giddings, L. S., & Koziol-McLain, J. (2005). A longitudinal survey of nurses' self-reported performance during an entry to practice programme. *Nursing Praxis in New Zealand, 21*(2), 37-46.
24. Chappell, K. B., & Richards, K. C. (2015). New Graduate Nurses, New Graduate Nurse Transition Programs, and Clinical Leadership Skill. *Journal for Nurses in Professional Development, 31*(3), 128-137.