

# The Effect of Transition to Practice Programs on the Self-Assessment of Newly Licensed Registered Nurses' Confidence in Quality and Safety Competency Attainment

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# **Abstract**

**AIM** The aim of the study was to evaluate effectiveness of transition to practice programs (TPPs) on self-assessment of quality and safety competency development in newly licensed registered nurses (NLRNs).

**BACKGROUND** TPPs are innovative strategies to promote quality and safety competencies. Hospital-based TPPs support and facilitate transition to practice.

**METHOD** A pretest-posttest design was used to determine if NLRNs' self-assessment of quality and safety knowledge, skills, and attitudes changed significantly over time and by TPP type as measured by the Nursing Quality and Safety Self-Inventory.

**RESULTS** Sixty-four NLRNs from three TPPs participated. A statistically significant increase in confidence in knowledge and skills was found with no significant changes in confidence attitudes. No significant changes were found based on TPP type or prelicensure program.

**CONCLUSION** The Nursing Quality and Safety Self-Inventory was a valid and reliable instrument for measuring changes in quality and safety knowledge, skills, and attitudes in NLRNs. TPPs are effective strategies to advance confidence in quality and safety competencies.

KEY WORDS Clinical Competence - New Graduate Nurses - Nursing Practice - Transitional Programs

ver the past two decades, concerns have been raised about the adequacy of preparation for hospital-based practice among newly licensed registered nurses (NLRNs; Advisory Board Company, 2008; Herron, 2018; Institute of Medicine [IOM], 2003; Murray, Sundin, & Cope, 2018; The Joint Commission [TJC], 2010). The IOM (2011) called for innovative educational strategies to be developed in order to improve professional education and increase focus on the achievement of competence in targeted areas. A transition to practice program (TPP) based on quality and safety competencies is one innovative strategy to promote targeted education in quality and safety for NLRNs.

## **BACKGROUND**

The Quality and Safety Education for Nurses (QSEN) Institute has laid the foundation for nurses to work in cultures of quality and safety. The QSEN project is a national initiative that identifies core competency domains and their corresponding target areas, expressed as knowledge, skills, and attitudes (KSAs), needed by nurses to improve the quality and safety of health care systems (Cronenwett et al., 2007). QSEN was presented at the 2015 American Association of Nurse

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Executives conference to provide content on quality and safety competencies and practice, including how to apply current safety science to orientation, clinical advancement, and performance evaluation (Grdina, 2015).

The QSEN Institute changed nursing education and practice by focusing on a systems perspective to improve outcomes. A systems thinking approach involves the nurse understanding and valuing how components of a complex health care system affect care of patients (Dolansky & Moore, 2013; Sherwood & Zomorodi, 2014). For example, the nurse's ability to engage in better priority setting, delegation, interactions and collaboration, decision-making, and problem solving is influenced by the ability to view how any one piece of the work system is related to other factors and to the whole (Dolansky & Moore, 2013).

Based on the IOM's five competency domains (IOM, 2003), a national advisory board and QSEN faculty defined nursing competencies, added the domain of safety, and proposed KSAs for each competency. The six resulting competency domains are patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics. Definitions of the competency domains and their corresponding KSAs are made public by QSEN as a resource to guide curricular development for formal academic programs, TPPs, and continuing education programs, making this an appropriate framework to guide a practice-based intervention (Cronenwett et al., 2007).

The 2011 IOM report recommended that organizations provide training programs for NLRNs. In addition, a Carnegie Foundation report (Benner, Sutphen, Leonard, & Day, 2009), the National Council of State Boards of Nursing (2009), the Commission on Collegiate Nursing Education (2008), and TJC (2005) also advocate training

programs as essential to support the transition into practice. A nurse TPP provides structured opportunities to expand clinical and professional competencies.

There is inconsistency in nursing regarding the use of terms to describe training programs offered to support the transition to practice. Organizations refer to such programs as nurse residency programs, nurse internship programs, or TPPs. Although different labels are used, the objective of the training programs remains the same: to facilitate the NLRN's transition from student to the role of professional registered nurse.

TJC describes TPPs as "planned, comprehensive periods of time 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" (IOM, 2011, pp. 120-121). Evidence suggests that TPPs are necessary to create a supportive environment for new nurses, as demonstrated by increased job satisfaction and retention rates (Bratt & Felzer, 2011, 2012; Setter, Walker, Connelly, & Peterman, 2011; Thomson, 2011). As recommended by TJC (2005), the content, length, and structure of TPPs may differ to meet the levels of undergraduate preparation as well as the roles ultimately to be obtained by the NLRNs, but two common components are expected: theoretical classroom teaching and preceptor-guided clinical experiences (Missen, McKenna, & Beauchamp, 2014). The purpose of TPPs in the hospital-based setting is to help NLRNs transition to clinical practice, adapt to fastpaced environments, and respond effectively to the challenges in nursing practice (Bratt, 2009; Bratt & Felzer, 2011; Krugman et al., 2006).

As professional agencies recommend quality and safety education for health care providers to improve patient outcomes, the current status of quality and safety KSAs must be assessed among prelicensure nursing students, NLRNs, and experienced nurses. Studies indicate that self-reported quality and safety KSAs can be measured with regard to the six QSEN competency domains (Dycus & McKeon, 2009; Piscotty, Grobbel, & Abele, 2013; Sullivan, Hirst, & Cronenwett, 2009). The Nursing Quality and Safety Self-Inventory (NQSSI) is an instrument that measures self-reported confidence in quality and safety KSAs. Although validity and reliability had been established with nursing students, this instrument had not been used with NLRNs. The purpose of this study was to evaluate the effectiveness of hospital-based TPPs for increasing NLRNs' selfassessed levels of confidence in quality and safety KSAs using the NQSSI. It is hoped that the findings will permit nursing staff development educators to design TPPs that will smooth the transition of NLRNs from education to practice.

## **METHOD**

A quasi-experimental, pretest-posttest design was used to answer the following research questions:

- Is there a significant change in NLRNs' self-assessment of confidence in attaining quality and safety KSAs following participation in a TPP?
- 2. Which TPP is more effective in increasing NLRNs' self-assessment of confidence in attaining quality and safety knowledge over time?
- 3. Which TPP is more effective in increasing NLRNs' selfassessment of confidence in attaining quality and safety skills over time?
- 4. Which TPP is more effective in increasing NLRNs' selfassessment of confidence in attaining quality and safety attitudes over time?

5. Is there a significant difference in the NLRNs' self-assessment of confidence in attaining quality and safety KSAs by the type of prelicensure educational program the NLRN completed?

Participants were recruited from three acute care institutions with preexisting TPPs located in two states in southeastern New England. The institutions were purposely selected to evaluate the different types of TPP programs in the region and as the beginning step to building academic-practice partnerships. Institutional review board (IRB) approval was obtained from the university IRB and the IRB from each participating institution.

Hospital 1, part of a three-agency health care system, was a non-profit urban community hospital with 362 licensed beds. It offered a 12-week TPP where the NLRN practiced on a dedicated transition unit (DTU) with an instructor for the first 9 weeks. Didactic learning was incorporated throughout the 12-week program and included quality and safety competencies. After the 9 weeks on the DTU, the NLRN moved to his or her home unit with a preceptor for the final weeks of the program.

Hospital 2, which serves as a major trauma center for southeastern New England, was a private, not-for-profit, 719-bed academic medical center. The TPP included class lectures and hands-on clinical experiences in the simulation laboratory and patient care areas. Length of the TPP varied from 12 to 16 weeks, depending upon the assigned unit. QSEN competencies were embedded throughout the TPP, which included interprofessional, high-fidelity simulation experiences.

Hospital 3, part of an extensive regional health care system, was a 160-bed acute care community hospital. This institution assigned NLRNs to a TPP specifically designed for the NLRN's practice area. TPPs for NLRNs in specialty areas varied in length, ranging from 12 weeks for the critical care program to 6 months for the emergency nursing program, and included clinical time with a preceptor, simulation training for cardiac life support, and weekly didactic education. The TPP for NLRNs hired to medical-surgical units was 7 weeks long and consisted of preceptorships while rotating between units and shifts.

# Sample

Subjects recruited for this study were NLRNs, defined as nurses who graduated from an accredited, prelicensure nursing program within the past 12 months; were licensed as RNs; and currently practiced in a hospital setting, with no more than six months of experience as an RN prior to working in the current setting. There were no exclusions based on age, ethnicity, gender, or educational preparation.

Potential participants were identified from the new hire roster provided by the nursing professional practice departments at each hospital. Subjects were invited to participate by the principle investigator. Participation was voluntary and anonymous. Data collection took place from July 2015 through December 2016. Sample size was calculated a priori. Power analysis indicated a sample size of 64 would be sufficient to detect a medium effect size at 80 percent power with significance set at an alpha of .05.

## Instrument

Pretest and posttest self-reported confidence in quality and safety KSAs of the NLRNs was measured using the NQSSI. The NQSSI is an 18-item self-rated scale; each item corresponds with the knowledge, skills, or attitudes competency of each of the six QSEN competency domains (Piscotty et al., 2013). Items are rated on a 7-point Likert-type scale (7 = strongly agree, 1 = strongly disagree) with a neutral choice. An example of an item is: "I feel confident that I have

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the necessary knowledge to practice patient-centered nursing care." Scores are totaled for the inventory by calculating a mean score. A mean score can be calculated for knowledge, skills, or attitudes; greater mean scores signify greater confidence related to quality and safety competencies.

Piscotty et al. (2013) established construct and contrast validity of the instrument; the internal consistency coefficient was .93 for the total scale. The instrument was initially developed for use with nursing students, but as quality and safety competencies have become widespread as the foundation to prelicensure nursing education, it has also been used in nursing practice (Grdina, 2015; Sherwood & Zomorodi, 2014).

# **Data Analysis**

Data for the current study were collected at TPP entry and after completion. Data were analyzed using IBM SPSS, Version 24. Descriptive statistics were computed on all study variables to determine the presence of skewness, outliers, and pattern of missing data. Reliability and validity analysis was computed on the study instrument. Analysis of variance (ANOVA) was computed to compare basic demographic characteristics by hospital site. No significant differences by site were identified.

A paired sample *t*-test was used to determine if there were significant increases in NLRNs' self-assessment of confidence in attaining quality and safety KSAs following participation in a TPP. Mixed between/within-subject repeated-measures ANOVAs were used to determine if self-assessment of quality and safety KSAs changed significantly over time and by program type.

## **FINDINGS**

Sixty-four participants completed an NQSSI pretest and posttest. Demographics of the participants are displayed in Table 1.

Is there a significant change in NLRNs' self-assessment of confidence in attaining quality and safety KSAs following participation in a TPP?

A paired-samples t-test was used to compare mean NQSSI scores over time. There was a statistically significant increase in scores from Time 1 (M = 104.13, SD = 10.28) to Time 2 (M = 109.44, SD = 15.74), t(63) = 2.45, p = .017 (two-tailed). The mean change in NQSSI scores was 5.31, with a 95 percent confidence interval ranging from a lower bound of 0.98 to an upper bound of 9.65.

Which TPP is more effective in increasing NLRNs' self-assessment of confidence in attaining quality and safety knowledge over time?

A mixed between/within-subject repeated-measures ANOVA compared mean knowledge scores within subjects over time and between subjects by location of TPP (see Table 2). There was a substantial main effect for time, F(1, 61) = 8.99, p = .004, partial eta squared = .128, with total means showing an increase in knowledge scores across the two time periods. The main effect comparing the types of TPP was not significant, F(2, 61) = 0.13, p = .879, partial eta squared = .004, suggesting no difference in the effectiveness of TPP on knowledge between the hospitals. There was significant interaction between TPPs and time, F(2, 61) = 3.33, p = .042, partial eta squared = .099. Thus, follow-up pairwise comparisons were completed and indicated significant increases in knowledge scores over time at Hospital 2 and Hospital 3; Hospital 1 had a decrease in mean knowledge scores over time.

Which TPP is more effective in increasing NLRNs' self-assessment of confidence in attaining quality and safety skills over time?

**Table 1:** Characteristics of Participants

Age		Total	M (SD)
		N = 64	24.25 (3.92)
Gender		Total (N = 64)	Percent
	Female	n = 57	89.1
	Male	<i>n</i> = 6	9.4
	Transgender	<i>n</i> = 1	1.6
Ethnicity		Total (N = 64)	Percent
	Hispanic or Latino	n = 4	6.25
	Not Hispanic or Latino	n = 60	93.75
Race		Total (N = 64)	Percent
	Asian	<i>n</i> = 1	1.6
	Black or African American	n = 4	6.3
	White	n = 56	87.5
	Preferred not to answer	n = 3	4.7
Education		Total (N = 64)	Percent
	ADN	n = 8	12.5
	BSN	n = 56	87.5

A mixed between/within-subject repeated-measures ANOVA compared mean skills scores within subjects over time and between subjects by location of TPP (see Table 2). There was a substantial main effect for time, F(1, 61) = 10.17, p = .002, partial eta squared = .143, with total means showing an increase in knowledge scores across the two time periods. The main effect comparing the types of TPPs was not significant, F(2, 61) = 0.161, p = .852, partial eta squared = .005, suggesting no overall difference in the effectiveness of TPPs on skills between hospitals. However, there was significant interaction between TPPs and time, F(2, 61) = 4.097, p = .021, partial eta squared = .118. Hospital 2 and Hospital 3 showed an increase in total skills scores across the two time periods. Follow-up pairwise comparisons revealed a significant change in skills scores from pretest to posttest at Hospital 2 and Hospital 3. Hospital 1 had a decrease in mean skills scores.

Which TPP is more effective in increasing NLRNs' self-assessment of confidence in attaining quality and safety attitudes over time?

Table 2: Pretest and F	Posttest Subscale Score	s for the Nursing Qu	ality and Safe	ty Self-Inventory
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Posttest  M  (CD)
) (CD)
O) (S <i>D</i> )
45 36.27
8) (8.52)
45 38.17
5) (2.76)
39.39
2) (2.73)
92 37.86
1) (5.53)
4

A mixed between/within-subject repeated-measures ANOVA compared mean attitudes scores within subjects over time and between subjects by location of TPP (see Table 2). The assumption of homogeneity of variances was met. There was a nonsignificant main effect for time, F(1, 61) = 2.04, P = .159, partial eta squared = .032. The main effect comparing the types of TPP was not significant, F(2, 61) = 0.663, P = .519, partial eta squared = .021, suggesting no difference in the effectiveness of TPPs on attitude scores at the different hospitals. The interaction between TPPs and time was not significant, F(2, 61) = 2.491, P = .091, partial eta squared = .075.

Is there a significant difference in the NLRNs' self-assessment of confidence in attaining quality and safety KSAs by the type of prelicensure educational program the NLRN completed?

A mixed between/within-subject repeated-measures ANOVA compared mean NQSSI scores within subjects over time and between subjects by type of prelicensure educational program. The assumption of homogeneity of variances was met. There was a nonsignificant main effect for time, F(1, 62) = 0.467, p = .497, partial eta squared = .025. The main effect comparing the types of TPPs was not significant, F(1, 62) = 1.384, p = .244, partial eta squared = .022, suggesting no difference in NQSSI scores based on the type of prelicensure educational program. There was no significant interaction between the type of prelicensure educational program the NLRN completed and time, F(1, 62) = 1.583, p = .213, partial eta squared = .025.

## **DISCUSSION**

Overall, NLRNs have increased confidence in their total quality and safety KSAs after completing a TPP. Confidence in attaining quality and safety KSAs was measured using the NQSSI, a valid and reliable tool in this population. Prior to the current study, the NQSSI had not been utilized to measure quality and safety KSAs among NLRNs. Psychometric analysis demonstrated reliability and validity of the NQSSI with this population and an internal consistency coefficient of .94 for the total scale.

The intention of hospital-based TPPs is to facilitate transition to clinical practice by helping NLRNs acclimate to the fast-paced environments and successfully respond to the challenges in nursing practice (Bratt, 2009; Bratt & Felzer, 2011; Krugman et al., 2006). The IOM (2011) and TJC (2005) are not prescriptive regarding the curriculum, duration, and organization of TPPs. TPPs differ in agencies to meet levels of undergraduate preparation as well as the roles that will eventually be obtained by NLRNs. A study by Spector et al. (2015) is the first and only study to determine the effectiveness of TPPs in terms of safety and competence. The researchers suggest formal TPPs should be at least six months in length, integrate preceptorships, and include quality and safety competencies and specialty knowledge in area of practice. Most but not all of the Spector et al. recommendations are met by national programs that offer standard curricula.

NLRNs had a significant increase of confidence in attaining quality and safety knowledge and skills over time; however, there were no significant changes in confidence in attaining quality and safety attitudes over time. In addition, there were no significant changes in the NLRNs' self-assessment of confidence in attaining quality and safety KSAs based on attendance at a hospital-specific TPP. There was no significant change to the self-assessment of confidence in attaining quality and safety KSAs related to the type of prelicensure program. It is important to note, however, that the results from the sample as a whole mask variations found at the individual hospitals. The mean quality and safety KSA scores increased over time at Hospital 2 and 3 and decreased over time at Hospital 1. Hospital 1 is the only agency with a TPP that is structured around the DTU model.

The TPPs in which NLRNs were recruited for this study were from three different agencies. Hospital 1 and Hospital 3 are classified as smaller, community hospitals with 160 and 362 beds, respectively. Hospital 2 is classified as a large academic medical center licensed for 719 beds. Each TPP differed in length, ranging from seven weeks to six months. Commonalities are such that each program is part of a

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professional development initiative in a hospital that states it is dedicated to quality and safety. Although structured differently, each TPP follows a curriculum based on quality and safety competencies, utilizes a preceptorship at some point, and follows a cohort model. The seven-week general TPP at Hospital 3 did not include didactic learning opportunities; however, the programs for specialty areas incorporated weekly didactic experiences with longer program duration. Unique to Hospital 1 is a DTU. Only Hospital 2 incorporated high-fidelity simulation into the curriculum.

Everett-Thomas et al. (2015) studied NLRNs in a TPP utilizing preceptorship nursing and weekly didactic and simulation education, similar to the TPP model used at Hospital 2, and found that simulation scenarios significantly improved applied knowledge of NLRNs over time. Specifically, mean group scores for patient safety measures increased significantly during weekly simulation sessions. These findings are consistent with the findings of the current study such that mean NQSSI scores increased over time for the NLRNs at Hospital 2 participating in simulation experiences. However, when comparing the TPPs at the three hospitals, there was no difference in total NQSSI scores related to the specific TPP in which the NLRN participated.

The present study looked at the effect of TPPs in relation to the target areas of quality and safety competencies: KSAs. There were significant increases in knowledge scores over time at Hospital 2 and Hospital 3. In addition, the study revealed a significant change in skills scores from pretest to posttest at Hospital 2 and Hospital 3. These findings were consistent with the literature. Spector et al. (2015) reported NLRNs' self-ratings on specific competencies increased significantly over time. Also, Ginsburg, Tregunno, and Norton (2013) found self-reported confidence in knowledge of safety competencies increased as NLRNs transitioned from the classroom to practice setting.

Findings of this study suggested no difference in the effectiveness of TPPs on attitude scores at the different hospitals. Hospital 2 and Hospital 3 increased mean scores over time in the subscale area of attitudes, whereas Hospital 1 decreased mean scores over time in this subscale. This may be related to prelicensure educational level of the cohort, the DTU model, or other limitations of this study. No studies have evaluated factors that affect confidence in attainment of quality and safety attitudes of NLRNs.

Demographic characteristics, including age and educational level, may have an effect on self-reported quality and safety competencies and should be considered as possible covariates. The demographics of the sample at Hospital 1 differed from those of Hospital 2 and Hospital 3; Hospital 1 had a larger percentage of ADN-prepared NLRNs (40 percent) compared to less than 5 percent at the other two hospitals. When investigating whether there was a significant difference in self-assessment of confidence in attaining quality and safety KSAs by type of prelicensure educational program, there was no significant difference in mean scores over time or by type of program. These findings are consistent with findings from the literature (Fater, Weatherford, Ready, Finn, & Tangney, 2014; Kavanagh & Szweda, 2017; Sullivan et al., 2009), which found there were no differences in ratings between baccalaureate and associate degree graduates. However, the ADN-prepared group in the present study had a decrease in mean NQSSI scores over time, whereas the BSN-prepared group had increased mean scores over time. Identification of possible covariates in future research studies with NLRNs may help increase understanding of the transition process.

#### Limitations

Several limitations related to the sampling strategy, study method, and data analysis are acknowledged. The study sample was a convenience sample, and the results may not be generalizable. The pretest-posttest design and sample was a limitation. Another limitation of the study was the use of self-reported measures using questionnaires. Although confidentiality was provided for participants and health care organizations, the data were susceptible to social desirability response bias, and the NLRNs may have replied to questions in a socially desirable manner. They may not have provided an honest self-assessment of their quality and safety KSAs for fear of being viewed as inadequately prepared for practice.

# **Recommendations for Future Study**

Recommendations for future research include investigation of NLRNs' self-assessment of confidence in attaining quality and safety KSAs in additional settings with a larger, more diverse sample. Quality and safety KSAs could also be self-assessed by nurse preceptors. It would be interesting to investigate if preceptors have similar gaps in quality and safety knowledge, skills, or attitudes compared to NLRNs.

Further evaluation of structure and components of TPPs is necessary, and further investigation of the DTU model is warranted. The literature identifies best outcomes when TPPs include a preceptorship and are at least six months in length and the curriculum is based in quality and safety competencies (Spector et al., 2015). Because there is variability of curricular content and methods, there is a need to have a standardized definition of TPP that includes content, process, and intended population. Nurse educators and practice leaders can collaborate to design effective, evidence-based TPPs. Goode, Lynn, Krsek, and Bednash (2009) report that TPPs are a good value and cost-effective. However, further research is needed to demonstrate the importance of TPP for effectiveness related to patient outcomes and to validate a positive return on investment for funding sources.

# **IMPLICATIONS FOR NURSING EDUCATION**

To address the need for changes in how nurses are educated to meet practice demands, prelicensure educational programs have incorporated quality and safety competencies in their curricula (Cronenwett et al., 2007). However, transformation in nursing education is dependent upon academic-practice partnerships where both parties share the responsibility to develop nurses of the future (Kavanagh & Szweda, 2017). Evidence shows NLRNs who complete a TPP are safer, more confident, and better adjusted than those who do not (Spector et al., 2015). The best TPPs have a formal structure (Spector et al., 2015). The structure of TPPs should be continuously evaluated and improved to increase NLRNs' confidence in attaining quality and safety competencies and to ensure effectiveness of the academic-practice partnerships.

# **REFERENCES**

Advisory Board Company (2008). Bridging the preparation-practice gap: Best practices for accelerating practice readiness of nursing students, (Vol. 2), Washington, DC: Author

Benner, P., Sutphen, M., Leonard, V., & Day, L. (2009). Educating nurses: A call for radical transformation. San Francisco, CA: Jossey-Bass.

Bratt, M. M. (2009). Retaining the next generation of nurses: The Wisconsin nurse residency program provides a continuum of support. *Journal of Continuing Education in Nursing*, 40(9), 416-425. doi:10.3928/00220124-20090824-05

Bratt, M. M., & Felzer, H. M. (2011). Perceptions of professional practice and work environment of new graduates in a nurse residency program. *Journal of* 

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- Continuing Education in Nursing, 42(12), 559-568. doi:10.3928/00220124-20110516-03
- Bratt, M. M., & Felzer, H. M. (2012). Predictors of new graduate nurses' organizational commitment during a nurse residency program. *Journal for Nurses in Staff Development*, 28(3), 108-119. doi:10.1097/NND.0b013e31825515c4
- Commission on Collegiate Nursing Education. (2008). Standards for accreditation of post-baccalaureate nurse residency programs. Retrieved from www.aacn. nche.edu/ccne-accreditation/resstandards08.pdf.
- Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., ... Warren, J. (2007). Quality and Safety Education for Nurses. *Nursing Outlook*, 55(3), 122-131.
- Dolansky, M. A., & Moore, S. M. (2013). Quality and Safety Education for Nurses (QSEN): The key is systems thinking. Online Journal of Issues in Nursing, 18(3), 1-12.
- Dycus, P., & McKeon, L. (2009). Using QSEN to measure quality and safety knowledge, skills, and attitudes of experienced pediatric oncology nurses: An international study. *Quality Management in Healthcare*, 18(3), 202-208.
- Everett-Thomas, R., Valdes, B., Valdes, G., Shekhter, I., Fitzpatrick, M., Rosen, L., ... Bimbach, D. (2015). Using simulation technology to identify gaps between education and practice among new graduate nurses. *Journal of Continuing Education in Nursing*, 46(1), 34-40. doi:10.3928/00220124-20141122-01
- Fater, K., Weatherford, B., Ready, R., Finn, K., & Tangney, B. (2014). Expanding nurse of the future nursing core competencies across the academic-practice transition: A pilot study. *Journal of Continuing Education for Nurses*, 45(8), 366-372. doi:10.3928/00220124-20140716-03
- Ginsburg, L., Tregunno, D., & Norton, P. G. (2013). Self-reported patient safety competence among new graduates in medicine, nursing and pharmacy. BMJ Quality & Safety, 22(2), 147-154. doi:10.1136/bmjqs-2012-001308
- Goode, C. J., Lynn, M. R., Krsek, C., & Bednash, G. D. (2009). Nurse residency programs: An essential requirement for nursing. *Nursing Economic*\$, 27(3), 142-159.
- Grdina, R. (2015, January 27). AONE: Highlighting QSEN into practice! [Web log post]. Retrieved from http://qsen.org/aone-2015/
- Herron, E. K. (2018). New graduate nurses' preparation for recognition and prevention of failure to rescue: A qualitative study. *Journal of Clinical Nursing*, 27(1/2), e390-e401. doi:10.1111/jocn.14016
- Institute of Medicine (2003). Health professions education: A bridge to quality. Washington, DC: National Academies Press.
- Institute of Medicine (2011). The future of nursing: Leading change, advancing health. Washington, DC: National Academies Press.

- Joint Commission, The. (2005). Health care at the crossroads: Strategies for addressing the evolving nursing crisis. Retrieved from www.jointcommission.org/ assets/1/18/health\_care\_at\_the\_crossroads.pdf
- Kavanagh, J., & Szweda, C. (2017). A crisis in competency: The strategic and ethical imperative to assessing new graduate nurses' clinical reasoning. *Nursing Edu*cation Perspectives, 38(2), 57-62. doi:10.1097/01.NEP.0000000000000112
- Krugman, M., Bretschneider, J., Horn, P., Kresk, C., Moutafis, R., & Smith, M. (2006). The national post-baccalaureate graduate nurse residency program. *Journal for Nurses in Staff Development*, 22(4), 196-205.
- Missen, K., McKenna, L., & Beauchamp, A. (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*, 70(11), 2419-2433. doi:10.1111/jan.12464
- Murray, M., Sundin, D., & Cope, V. (2018). New graduate registered nurses' knowledge of patient safety and practice: A literature review. *Journal of Clinical Nursing*, 27(1/2), 31-47. doi:10.1111/jocn.13785
- National Council of State Boards of Nursing. (2009). Description of NCSBN's transition to practice model. Retrieved from https://www.ncsbn.org/13\_Transition toPractice\_modeldescription.pdf
- Piscotty, R., Grobbel, C., & Abele, C. (2013). Initial psychometric evaluation of the Nursing Quality and Safety Self-Inventory. *Journal of Nursing Education*, 52(5), 269-274. doi:10.3928/01484834-20130412-03
- Setter, R., Walker, M., Connelly, L. M., & Peterman, T. (2011). Nurse residency graduates' commitment to their first positions. *Journal for Nurses in Staff Development*, 27(2), 58-64. doi:10.1097/NND.0b013e31820eee49
- Sherwood, G., & Zomorodi, M. (2014). A new mindset for quality and safety: The QSEN competencies redefine nurses' roles in practice. *Nephrology Nursing Journal*, 41(1), 15-22. 72.
- Spector, N., Blegen, M., Silvestre, J., Barnsteiner, J., Lynn, M., Ulrich, B., ... Alexander, M. (2015). Transition to practice study in hospital settings. *Journal of Nursing Regulation*, 5(4), 24-28. doi:10.1016/S2155-8256(15)30031-4
- Sullivan, D. T., Hirst, D., & Cronenwett, L. (2009). Assessing quality and safety competencies of graduating prelicensure nursing students. *Nursing Outlook*, 57(6), 323-331. doi:10.1016/j.outlook.2009.08.004
- Thomson, S. (2011). Transition into practice: A comparison of outcomes between associate- and baccalaureate-prepared nurses participating in a nurse residency program. *Journal for Nurses in Staff Development*, 27(6), 266-271. doi:10.1097/ NND.0b013e3182309914



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