Chapter 14

New Graduate Transition into Practice: Improving Quality and Safety

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I am frightened for my patients and for my own license as I soon will be turned loose with only a resource person and expected to take a full load after only 5 days of orientation in my new assigned unit.

> –New graduate (North Carolina Foundation for Nursing Excellence, 2009, p. 35)

The evidence creates a compelling case for all new graduates to have a transition to practice from the student to the professional nurse role. Evidence has linked transition programs to improved safety and quality patient outcomes as well as to the increased retention of new graduate nurses. As a result, the National Council of State Boards of Nursing (NCSBN) has developed a transition to practice (TTP) model that incorporates the Quality and Safety Education in Nursing (QSEN) competencies. This chapter discusses the evidence for TTP programs, describes the NCSBN TTP model and examples of successful TTP programs/residencies, and highlights strategies for educators in preparing the student for transition to practice.

Transition to practice defined

Transition to practice is defined by the NCSBN as a formal program of active learning, implemented across all settings for all newly licensed nurses (registered nurses and licensed practical/vocational nurses), designed to support

their progression from education to practice. Transition to practice is a comprehensive program that is integrated throughout the health system and supported from the top down. Orientation, on the other hand, is a separate process that is focused on the hiring institution, and not on transitioning the new nurses to their futures in nursing practice. The American Nurses Association (2000) defines orientation as the process of introducing staff to the philosophy, goals, policies, procedures, role expectations, and other factors needed to function in a specific work setting. Orientation takes place both for new employees and when changes in nurses' roles, responsibilities, and practice settings occur.

The quote at the beginning of this chapter is representative of many new nurses. While some employers provide comprehensive transition to practice programs, transition programs are not required in nursing. Yet many professions such as medicine, pharmacy, pastoral care, physical therapy, and teaching require formalized transition to practice programs for their graduates. Many of these programs receive either federal or state assistance. A recent employer study (Budden, 2011), using the NCSBN and American Nurses Association definitions, found that currently only 9%–31% of employers reported offering a transition to practice program and 1%–8% of employers don't even offer an orientation program to their new graduates.

Evidence linking transition programs to quality and safety

There is evidence linking improved patient care to standardized transition programs in the areas of safety, competence, and retention.

Safety

Research links new nurses to patient safety issues, such as near misses, adverse events, and practice errors (Berens, 2000; Bjørk & Kirkevold, 1999; del Bueno, 2005; Ebright, Urden, Patterson, & Chalko, 2004; Johnstone & Kanitsaki, 2006; Johnstone & Kanitsaki, 2008; Massachusetts Board of Registration in Nursing [MABRN], 2007; NCSBN, 2007; Orsolini-Hain & Malone, 2007). Newly licensed nurses have significant job stresses (Elfering, Semmer, & Grebner, 2006; Fink, Krugman, Casey, & Goode, 2008; NCSBN, 2007; Williams, Goode, Krsek, Bednash, & Lynn, 2007), and this stress has been linked to patient errors (Elfering et al., 2006; NCSBN, 2007). In another study, newly licensed nurses who reported higher stress ratings also reported making significantly more errors than new nurses reporting lower stress levels (NCSBN, 2007). Interestingly, in the NCSBN (2007) national study of newly licensed nurses, the stress levels of new nurses were highest at the 3-6 month period of practice. This is most likely the period when they are no longer in any kind of a transition or orientation program. In the study of the University Health System Consortium/American Association of Colleges of Nursing (UHC/AACN) residency program, stress gradually decreased over the year

(Williams et al., 2007). These results indicate that a comprehensive yearlong transition program may decrease stress, which in turn is related to safe patient care.

Two reports specifically cited reports where nurses were disciplined by the Board of Nursing for violating the Nurse Practice Act (MABRN, 2007; NCSBN, 2009a), and one addressed incident reports (Johnstone & Kanitsaki, 2008). When reviewing discipline data, it should be noted that new nurses are often given the benefit of the doubt. Further, there is quite a leap between discipline and minor errors or near misses; the latter more often is seen with new nurses (Ebright et al., 2004; MABRN, 2007). The NCSBN (2009a) Nursys data on discipline in the boards of nursing over 10 years found that 4.1% of the discipline was with novice nurses. The MABRN's (2007) findings on discipline data from 77 nursing homes had no novice RNs in the analysis. However, of 44 LPNs disciplined, 7 were novices. In the Massachusetts Board of Registration in Nursing study, the researchers concluded that errors with new nurses were linked to inexperience, lack of familiarity, and lack of consistent preceptors. They recommended more supervision and support for new nurses.

A study conducted in Australia (Johnstone & Kanitsaki, 2008) found that incident reporting increased during the novice nurse's first year in a transition program, most likely because they were taught about the importance of reporting errors and near misses for root cause analyses. These nurses were able to integrate patient safety into the system within 3 to 4 months of this 12-month program. The key indicators they used to validate this integration included new graduates' familiarity with the following, and these tie into the above findings from Ebright et al. (2004) and the MABRN (2007):

- hospital layout,
- hospital policies regarding risk assessment tools,
- processes of evidence-based practice, and
- incident reporting.

New nurses often engage in concrete thinking and focus on technology (Benner, 2004; Orsolini-Hain & Malone, 2007), thereby missing the bigger picture. This can be devastating during these complex times in health care (Benner, Sutphen, Leonard, & Day, 2010; del Bueno, 2005; Ebright et al., 2004). With an increasing ratio of novice nurses to seasoned nurses predicted for the future (Orsolini-Hain & Malone, 2007), it is possible that novices are assisting each other, thus putting them in situations where errors in judgment are not corrected by colleagues (Ebright et al., 2004). Indeed, in a prospective study, Bjørk and Kirkevold (1999) found that patient safety can be compromised when there are no effective transition programs in place. They conducted a longitudinal study in Norway, videotaping nursing practice and conducting interviews with nurses and patients. While the nurses reported they had become efficient and rated themselves as better nurses over time, the analysis of their practice revealed that they made the same practice

errors (such as contaminating wounds and unsafely removing wound drains) at the end of the study as they made at the beginning. The authors reported that because there were limited opportunities for feedback and reflection, the new nurses did not learn from their mistakes.

Near misses have been cited as a problem for new graduates. Ebright and colleagues (2004) interviewed new nurses and found that of 12 recruited new nurse participants, 7 reported at least one near-miss event, while 1 nurse described two events. Some of the themes identified related to near misses/adverse events, for example, difficulty with first-time experiences, handing off patients, and novices assisting novices, among others. Similar to the Bjørk and Kirkevold (1999) study, if new graduates do not have supportive transition to practice programs, they won't learn from their near misses.

Inexperienced nurses who aren't supported may affect patient safety because of missed nursing care. When nursing care is omitted, patient outcomes could be adversely affected, thus promoting falls, failure to rescue, pressure ulcers, or other adverse events. Using focus groups, Kalisch (2006) identified seven themes as to why care is missed; some of these included the poor use of existing staff resources and ineffective delegation. Further, sub-themes included inadequate orientations for new nurses and inconsistent assignments. Without consistent patient assignments and opportunities for follow-through, novice nurses don't have the opportunity to get to know their patients well enough to recognize changes. Similarly, Benner and colleagues (2010) cited student nurses' lack of opportunities for patient follow-up as one reason for implementing transition programs in nursing. Del Bueno (2005), for example, found when new nurses were given patient scenarios, 50% would miss life-threatening changes. Further, 65%–76% of inexperienced RNs did not meet the expectations for entry-level clinical judgment, and the majority had difficulty translating knowledge and theory into practice. Yet, Ashcraft (2004), in presenting three cases, discussed how crucial pattern recognition is when patients are in prearrest states. Since novice nurses take longer to "put the pieces together," they need support from experienced nurses in these critical situations. A standardized transition program would assist new nurses to identify subtle changes and avoid practice errors.

An NCSBN (2007) national study found that when transition programs in hospitals addressed specialty care, new nurses reported making significantly fewer practice errors. Similarly, when nurses perceived they were more competent, they reported making significantly fewer practice errors, and this was especially true when they reported more competence in clinical reasoning abilities and communication and interpersonal relationships.

Novice nurses who do not take part in transition programs have a high turnover rate. When these nurses leave, they are often replaced by temporary nurses who tend to make more errors. Berens (2000), after reviewing Illinois state disciplinary data, reported that temporary nurses were the increased focus of investigations and their reasons for errors were most often linked to lack of knowledge of hospital procedure and unfamiliarity with patients. Unfamiliarity with patients and units and first- time experiences have been

cited as reasons for near misses or errors by others (MABRN, 2007; Ebright et al., 2004). In addition, Duffield, Roche, O'Brien-Pallas, and Catling-Paull (2009) found that downstream effects of turnover (which they termed "churn") included adverse outcomes for patients, a lack of continuity of care, additional time required to manage employees, and loss in staff productivity.

Competence

Keller, Meekins, and Summers (2006) provide insight as to why new nurses need continued support for the first year, even though they graduated from a Board of Nursing-approved nursing program and passed the NCLEX. They state that nursing education cannot prepare new graduates for acculturating into their workplaces and for using a recently acquired new vernacular, which differs across specialties. New graduates, the authors assert, are expected to become skilled in a wide range of absolutely necessary skills and to gain a sense of the wider world of their organization and health care. They describe some of these necessary skills as being self-aware and learning about team dynamics, leading teams, coordinating care, managing conflict, understanding the psychological effects of change and transition, communication, evidence-based practice, systems thinking, and financial pressures. Neophyte nurses become overwhelmed and stressed with all of these expectations (Elfering et al., 2006; NCSBN, 2007; Williams et al., 2007), and stress in the first year of practice has been significantly related to practice errors (Elfering et al., 2006; NCSBN, 2007).

Employers report new graduates are not ready to practice. NCSBN studies found that fewer than 50% of employers reported "yes definitely" when asked if new graduates are ready to provide safe and effective care (NCSBN, 2002; NCSBN, 2004a). Similarly, Berkow, Virkstis, Stewart, and Conway (2008), from the Nursing Executive Center, conducted a survey of more than 5,700 frontline nurse leaders, asking about employer perceptions of new graduates on 36 competencies. Improvement was needed across levels of education (ADN and BSN). For example, 53% of employers were satisfied with the top-rated competency (utilization of information technologies), while only 10% were satisfied with the last-rated competencies, such as delegation of tasks. Berkow and colleagues (2008) noted that the bottom-rated competencies would be better taught in an experiential environment, such as a transition to practice program.

There is evidence linking competence to the need for effective transition programs (Benner et al., 2010; Beyea, Slattery, & von Reyn, 2010; Bjørk & Kirkevold, 1999; del Bueno, 2005; NCSBN, 2007; NCSBN, 2009b; Orsolini-Hain & Malone, 2007; Williams et al., 2007). NCSBN (2007) reported that new graduates were significantly more likely to self-report practice errors when they also perceived themselves to have decreased competence and increased stress. In this study, 3 to 6 months after hire was the vulnerable period where nurses reported more stress and less competence and therefore were at risk for practice breakdown. Other research has shown this "V-shaped" pattern,

showing declines in novice nurse variables at mid-program, with subsequent gains (Halfer, Graf, & Sullivan, 2008; Williams et al., 2007), though in these studies the decline began at the 6-month level. This evidence supports the vulnerable period of new graduates as occurring from 3 to 9 months after employment.

In the Bjørk and Kirkevold (1999) study, there were no opportunities for feedback or reflective practice, which likely would have improved the competence of these nurses. This is excellent empirical data about what can happen when new nurses do not have supportive transition programs.

Beyea and others (2010) studied an experiential transition program using simulation, measuring confidence, competence, and readiness to practice, all of which significantly increased after their program. This program uses simulation vignettes that highlight high-risk and low-frequency events (such as cardiac arrests), as well as commonly occurring clinical situations. According to this study, a transition program incorporating active learning is a highly effective way of developing competency and confidence in new graduates.

Retention

Some might argue whether job retention is a fair measure of quality and safety in patient care because, while nurses may leave one job during the first year, they generally move to another position. The first workplace, however, is challenged with recruiting and orienting a new nurse, and often the employer must fill the nurse's position with a temporary nurse. Job satisfaction is a predictor of anticipated turnover and it has been linked to adverse health care outcomes (Beecroft, Hernandez, & Reid, 2008). Other evidence links the use of temporary nurses to adverse health outcomes (Alonso-Echanove et al., 2003; Berens, 2000; MABRN, 2007), though the findings are conflicting. For example, Aiken (2007) did not find that temporary nurses affected quality and safety, while Bae, Mark, and Fried (2010) found that there were significantly more falls on units with high levels of temporary nurses, but there were significantly fewer medication errors on those units, compared to those without temporary nurses. More research is needed to better understand the relationship between turnover and safety and quality outcomes.

Do new graduates leave nursing altogether? Kovner and Djukic (2009) report that 98% of nurses who pass the NCLEX are working in nursing 2 years later. Yet, Orsolini-Hain and Malone (2007), reviewing national data from the U.S. Department of Health and Human Services, report that 4.5% of nurses were employed outside of nursing in the late 1980s, whereas in 2004 it was 16.8%. Additional research in this area is needed. The literature reports moderate to high turnover rates during new graduates' first year of practice. Turnover rates are not reported the same across studies, and thus it is difficult to compare. Turnover rates have been reported as high as between 35% and 60% for 1 year in practice (Advisory Board Company, 2006; Halfer et al., 2008; Pine & Tart, 2007; Ulrich et al., 2010; Williams et al., 2007). Kovner and

Djukic (2009) report a 26% turnover rate in 2 years using unpublished raw data from the RN Work Project. Ulrich and others (2010), in analyzing new graduate turnover data from hospitals prior to implementing the Versant RN Residency, found an average new graduate turnover of 27% in the first 12 months and 30% in the second 12 months, resulting in a cumulative 24-month turnover of 49%. Comprehensive transition programs, however, are associated with significantly decreased turnover rates after the programs are implemented (Beecroft, Kunzman, & Krozek, 2001; Halfer et al., 2008; Pine & Tart, 2007; Ulrich et al., 2010; Williams et al., 2007).

A variable currently affecting turnover rates may be the economy. For example, Budden (2011), in a survey conducted in 2009–2010, found that 61% of hospital employers reported low turnover rates for new nurses, though it is unclear if this could be due to the economic downturn during that time period. It appears that across the United States, nurses are not leaving their positions until the job climate improves (Randolph, 2010).

Data indicate that temporary nurses, who are often hired when a new nurse resigns, have an increased number of disciplinary complaints filed at state boards of nursing (Berens, 2000) compared with nurses hired on a permanent basis. Similarly, errors made by novice LPNs in nursing homes (MABRN, 2007) and near misses reported by RNs (Ebright et al., 2004) are linked to unfamiliarity with the workplace setting. Further, every study examined found that increased retention resulted from a formal transition program (Beecroft et al., 2001; Halfer, 2007; Keller et al., 2006; Mississippi Office of Nursing Workforce, 2010; NCSBN, 2007; Pine & Tart, 2007; Ulrich et al., 2010; Vermont Nurses in Partnership [VNIP], 2010; Williams et al., 2007).

The solution: a standardized model

A committee of NCSBN's membership, with a representative of the Association of Nurse Executives at each meeting, spent a year reviewing the evidence to develop a standardized transition model. The model was designed to be flexible in that any program (independently developed or in partnership with other institutions) that meets the requirements of this model can be used. It is robust because it is intended to be used across all settings and with all levels of education, from practical nursing to master's entry nursing.

At each meeting, members had collaborative conference calls with nursing and health care organizations to gain input, and many changes were made after communicating with more than 35 nursing and health care organizations. For example, the model was recategorized to highlight the QSEN competencies so that it would be in line with national nursing initiatives. NCSBN's TTP model was designed as a "no-blame" model. That is, it was assumed that education programs are adequately preparing our nurses for practice and that practice settings are not unfairly expecting new nurses to move immediately into skilled practice. Instead, NCSBN believes there is a missing piece in nursing: no standardized transition to practice program.
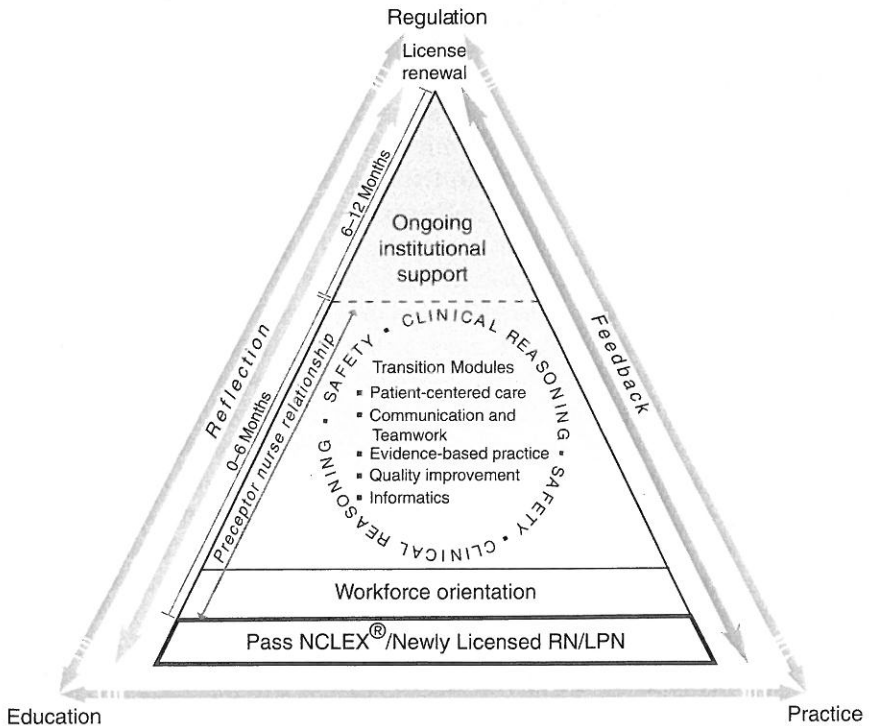
Figure 14.1   Transition to practice model.
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Elements of the model are described below. A visual description of the model is shown in Figure 14.1.

Preceptorship for 6 months followed by institutional support for 6 months

NCSBN's model is dependent on a well-developed preceptor-nurse relationship, in which preceptors are trained for the role, either in face-to-face or online courses. Preceptors work with the new graduates throughout the 6-month transition program, though the level of oversight decreases as the newly licensed nurse becomes more experienced, thus fostering independence.

The evidence supports that preceptors must be skilled in the role. Often, preceptors feel unprepared and unsupported for the preceptorship role. For example, in one study of 86 preceptors, researchers found preceptors reported they were unprepared to precept new graduates and they needed more support and recognition (Yonge, Hagler, Cox, & Drefs, 2008). While many transition programs incorporate preceptor training, Vermont Nurses in Partnership (2010) is an exemplary model of preceptor education that has been well developed. There are also other preceptor models available in the literature (Nicol & Young, 2007). Phillips (2006) describes the pros and cons

of online preceptor education and what to consider when planning a success-ful online training program. Additionally, there is evidence that team preceptorships are successful (Beecroft et al., 2008), and therefore team preceptoring would be an acceptable strategy in the NCSBN model. When preceptors are not available, a national website could be designed to connect preceptors, through a remote interface, to novice nurses. This innovative approach has been successfully implemented in Scotland's Flying Start program (Roxburgh et al., 2010) and could provide new nurses with opportunities for feedback, reflection, and support, even when preceptors are not geographically available.

During the last 6 months of NCSBN's TTP model, the institution provides ongoing institutional support. This includes allowing the new nurse to evaluate any processes that could be done differently and being empowered to make some changes. During this period, the new nurses reflect on what lessons were learned from specific situations. In order to facilitate feedback, there should be a discussion of the performance appraisal, including any strengths or weaknesses. In addition, this is a good time for the institution to provide new nurses with opportunities to review any sentinel events or near misses that have occurred so that they can develop an understanding of problem solving methods. The institution will encourage the new nurse to participate in committee work or grand rounds in order to engage the new nurse with the institution. Finally, there will be a celebration of the end of the program (whether individual or hospital-wide) in order to formally recognize the new nurse's transition period.

NCSBN TTP: experiential learning—five modules

Transition programs, in order to be effective in promoting safe and quality patient outcomes, must incorporate the broad concepts from the QSEN initiative (Cronenwett et al., 2007), allowing experiential learning. Johnstone and Kanitsaki (2006, 2008) have found that, particularly related to safety and quality education, experiential learning is essential. In their undergraduate programs, students often are not able to actively learn the concepts they are taught because of the limitations of clinical education (Benner et al., 2010).

Therefore, these five transition modules, supported by the evidence, are based on the Institute of Medicine (Greiner & Knebel, 2003) competencies and the QSEN initiative (Cronenwett et al., 2007). A sixth module trains preceptors for the role.

- Patient-centered care
- Communication and teamwork
- Evidence-based practice
- Quality improvement
- Informatics

Safety, clinical reasoning, and feedback and reflection are threaded through-out all the modules. The content of the modules should be incorporated into the new nurses' experiences so they continue to learn experientially, interac-tively, and from preceptor role modeling how to "think like a nurse." This dis-cussion provides a broad scope of the modules; specific competency content is in other chapters.

Patient-centered care

Patient-centered care emphasizes specialty content and prioritizing/organiz-ing care around the needs of the patient and family (Walton & Barnsteiner, 2012). Specialty content in a transition program has been linked significantly to self-reports of lower practice errors (NCSBN, 2007). Other research sup-ports integrating specialty practice into transition programs (Beecroft et al., 2001; Benner et al., 2010; Beyea et al., 2010; Halfer, 2007; Joint Commission, 2002; Keller et al., 2006; Pine & Tart, 2007; Roxburgh et al., 2010; VNIP, 2010). The preceptor should be trained on the importance of assisting new gradu-ates to identify and learn from experts in the new nurse's specialty.

Prioritizing and organizing is a part of clinical practice that is often a weak-ness for novice nurses (Berkow et al., 2008; Halfer, 2007; NCSBN, 2004b; NCSBN, 2006b; Williams et al., 2007), most likely because of lack of experi-ence. Specifically, the UHC/AACN residency program measured ability to organize and prioritize before and after their program and found significant increases at the end of the program (Williams et al., 2007). While none of the transition programs reviewed specifically identified boundary issues (bound-ary crossings, violations, misuse of social media, etc.) as a topic, boards of nursing have identified this as an important area to stress in the TTP model.

Communication and teamwork

Communication and teamwork are essential in any transition model. The 2003 IOM report on health professions education (Greiner & Knebel, 2003) stressed the importance of teaching health care students to collaborate across profes-sions. McKay and Crippen (2008) report that in hospitals where collaboration occurs, there is a 41% lower mortality rate than would be predicted. In other hospitals, McKay and Crippen (2008) report, where collaborative communica-tion is not emphasized (or not part of the culture), mortality rates were 58% higher than would be predicted. Similarly, enhanced communication in hospi-tals has been linked to nurse satisfaction, lower costs, and greater responsive-ness of health care providers (McKay & Crippen, 2008). One NCSBN (2007) study found that new nurses perceived they made significantly fewer practice errors when they reported being more competent in communication and interpersonal relationships. Yet Benner et al. (2010) report that prelicensure nursing programs provide their students with few opportunities for interpro-fessional communication. Most of the reports of transition programs reviewed recommended a purposeful integration of communication, including interpro-fessional relationships, into transition programs (Beecroft et al., 2001; Beyea

et al., 2010; Halfer, 2007; Keller et al., 2006; Pine & Tart, 2007; Roxburgh et al., 2010; Williams et al., 2007).

The communication and teamwork module also includes role socialization, which is a very important concept for new nurses. They must have a good understanding of their scope of practice, as well as that of others on the health care team (Disch, 2012). Closely related to role socialization is the need for new nurses to develop a better understanding of delegating and supervising. NCSBN studies of new nurses, since 2002, have consistently found that new nurses report a lack of understanding of delegation (NCSBN, 2004b; 2006a, b; 2007; 2009a, b), as do others (Berkow et al., 2008). Transition programs should be incorporating delegation/supervising into their curricula, though not many specifically indicate that.

Evidence-based practice

Another essential experiential module is evidence-based practice, because nurses are expected to base their practice on the evidence (Cronenwett et al., 2007; Greiner & Knebel, 2003, Tracey & Barnsteiner, 2012). Yet NCSBN research (NCSBN, 2006a, b) has shown that new nurses are weak in this area. Evidence-based practice is integral to most of the TTP programs. In the Launch into Nursing program in Texas, for example, new nurses participate in an evidence-based project and present the results to the hospital unit on which they work (Keller et al., 2006). The international and national programs support incorporating evidence-based practice into transition programs (Beecroft et al., 2001; Roxborgh, 2010; Williams et al., 2007), as do individual programs (Pine & Tart, 2007; Bratt, 2009).

Quality improvement

With health care institutions focusing on safety and improving their systems, novice nurses need experiential learning related to quality improvement processes, such as Six Sigma (Johnson, 2012; Pocha, 2010). Berkow et al. (2008) surveyed educators and practice leaders about the emphasis of 36 competencies taught in nursing programs, compared to how prepared new nurses were in those competencies. They found that quality improvement, priority setting, and delegation were not emphasized enough in nursing education and concluded they are best learned in a practice setting with experiential learning, such as a TTP program. Additionally, Barton, Armstrong, Preheim, Gelmon, and Andrus (2009) conducted a national Delphi study to determine the progression of quality and safety competencies and identified quality improvement knowledge and skills to be included in TTP programs (Appendix C).

Informatics

As electronic health records become more pervasive in health care, nurses need informatics skills (Warren, 2012). Yet nursing students have little, and sometimes no, opportunity to learn these skills as students in the workplace.

Newly licensed nurses, therefore, will learn how to identify the electronic information at the point of care and learn how to access information that isn't readily available but is needed. The TIGER initiative (Technology Informatics Guiding Educational Reform; 2010) is a valuable resource in this module.

Threads throughout the curriculum

Safety

Teaching safety is an essential part of a transition to practice regulatory model, and this is threaded throughout all the modules. Johnstone and Kanitsaki (2006, 2008) in Australia have reported on the importance of experientially teaching risk management to new nurses. Cronenwett and colleagues (2007), using the expertise of national health care leaders across disciplines, have described safety as a competency in detail, and this could be used in transition programs (Barnsteiner, 2012). The resulting consensus opinion document, QSEN, can be considered excellent evidence for this transition model (see Appendixes A and B). The MABRN (2007) findings on nursing home errors called attention to addressing safety issues in transition programs, based on their review of discipline of new practical nurse graduates. Likewise, an NCSBN study (2007) found that, according to self-reports, practice errors made by new graduates were prevalent. Many of the successful transition programs focus on safety (Beecroft et al., 2001; Beyea et al., 2010; Bratt, 2009; Halfer, 2007; Pine & Tart, 2007; Roxburgh, 2010; Williams et al., 2007).

Clinical reasoning

Clinical reasoning, sometimes referred to as critical thinking or clinical judgment, is a second essential thread integrated throughout all the TTP modules. The Carnegie study on nursing education points out this is a critical point in which nurses learn to "think like a nurse" (Benner et al., 2010). Many transition programs specifically report integration of clinical reasoning/critical thinking (Beecroft et al., 2001; Bratt, 2009; Halfer, 2007; Keller et al., 2006; Mississippi Office of Nursing Workforce, 2010; Molinari, Monserud, & Hudzinski, 2008; Pine & Tart, 2007; VNIP, 2010; Williams et al., 2007). The Dartmouth program (Beyea et al., 2010) provides an exemplary model in the use of simulation to assist novice nurses in actively making decisions in simulated experiences.

Feedback and reflection

Feedback and reflection are a third thread in the TTP model and should be formally maintained during the 6-month transition program as well as during the 6 months that follow. New nurses need feedback on their practice,

along with an opportunity to reflect, to improve their practice. Consistent with Bjørk and Kirkevold's (1999) study, without those opportunities, new graduates are at risk of making the same mistakes time and time again. It is very important for preceptors to be taught how to provide constructive feedback and how to foster reflective practice. Many of the transition programs included in this review did provide opportunities for feedback and reflection (Beyea et al., 2010; Bratt, 2009; Halfer, 2007; Keller et al., 2006; Pine & Tart, 2007; Roxburgh, 2010; Williams et al., 2007). Horton-Deutsch and Sherwood (2008) show how fostering reflection, particularly through journaling and personal inventories, is a successful leadership development strategy.

A multisite, randomized study of the model

NCSBN, in collaboration with a Research Advisory Panel of experts in safety and quality research of new graduates, is conducting a longitudinal, multisite, randomized study to evaluate its TTP model. It is the first study to examine patient outcomes in standardized nursing transition programs compared with sites that use their traditional programs. The primary objective of this study is to determine whether newly licensed nurses' participation in NCSBN's TTP model improves patient safety, leads to higher quality outcomes, and improves nurse retention. The secondary objectives are (1) to determine whether NCSBN's preceptor module adequately prepares nurses for the preceptor role, (2) to identify the challenges and potential solutions of planning and implementing the transition model within the organization and across the state/jurisdiction, and (3) to determine the cost-benefit analysis to implement the TTP model at a health care organization by evaluating the return on investment based on new nurse turnover rates. To establish whether the primary objective has been achieved, this study will examine the differences between the experimental group and the control group across the variables highlighted in Table 14.1. The final results of the study will be reported in May of 2014. If the study finds that a standardized transition program improves quality and safety, the state boards of nursing may decide to require new graduates to complete a transition program before renewing their license after the first year in practice.

Transition to practice programs: examples

Two programs that have demonstrated success in TTP are the University Health System Consortium/American Association of Colleges of Nursing (UHC/AACN) Nurse Residency Program (begun in 2002) and the Versant RN Residency (begun in 1999). The use of the Benner novice-to-expert model is central to both programs as a foundation, an evidence-based curriculum, preceptor-guided clinical experiences, supportive components (i.e., mentoring),

Table 14.1 Outcome measures for phase I of NCSBN's transition to practice study

Outcomes	Measurement (collected per unit of new nurses and per hospital)
Patient safety: infection rates, decubiti, post-op thrombosis, falls with and without injury	National Database of Nursing Quality Indicators data
Adverse events: failure to rescue, medication errors	Reports from institution
Patient satisfaction	System organization uses, such as Press Ganey
Length of stay	Report from institution
Competence of the new nurse	Surveys of new nurse and preceptor
Experiential knowledge of the new nurse	Knowledge assessment pre- and postprogram
Stress perceived by the new nurse	Report of new nurse
New nurse job satisfaction	Use of established tool (Brayfield & Rothe, 1951)
Retention	Actual turnover rates and reports by new nurses of intent to leave

celebrations and recognition, a dedicated residency coordinator/manager, and the measurement of outcomes.

The UHC/AACN Nurse Residency Program began as a joint venture task force between UHC Chief Nursing Officers and AACN deans to develop a post-baccalaureate residency program (Goode & Williams, 2004). A central tenet of the UHC/AACN Nurse Residency Program is collaboration between the academic hospital and its affiliated school of nursing (Krugman et al., 2006). The program is presented in two phases. The first phase, which occurs in the first 6 months, includes the hospital's orientation, the incorporation of a 1:1 baccalaureate-prepared clinical preceptor, clinical specialty training, and monthly resident seminars with an emphasis on mentoring and professional development. The second phase, in the second 6 months, includes monthly seminars with a resident facilitator. Two key components are the cohort groups and their relationships, clinical narratives to promote reflective inquiry, and standardized evidence-based residency curriculum (Krugman et al., 2006). Outcomes of the UHC/AACN Nurse Residency Program found improved retention and increased graduate perceptions that they grew in terms of organizing and prioritizing, communicating, and providing clinical leadership. New graduates also report significantly decreased stress (Williams et al., 2007).

The Versant RN Residency began in 1999 at Children's Hospital of Los Angeles and has since expanded nationwide. The Versant RN Residency is designed to meet the needs of all new graduate nurses. It is a structured, evidence-based residency that consists of an 18-week clinical immersion using

1:1 preceptors and standardized competencies and curricula (which have been crosswalked to the QSEN recommendations). Residents also have targeted experiences in units and departments related to their home units ("looping").

Real-time information about resident progress is shared between residents, preceptors, educators, and other individuals involved in the Versant RN Residency via a web portal. Supportive components (i.e., mentoring and debriefing) are an integral part of the residency. Data is collected at various points throughout the RN residency and for the first 5 years of the new graduate's practice as well as from organizational comparison groups. Outcomes of the Versant RN Residency include accelerated development of new graduate competence and confidence, a significant increase in new graduate retention, improved engagement of new graduates during and after the residency, and positive organizational transformation (Ulrich et al., 2010).

Both the UHC/AACN Nurse Residency Program and the Versant RN Residency have demonstrated the need for dedicated organizational commitment and resources when implementing a TTP program. The evidence from both programs demonstrates that TTP programs can have beneficial results for individual new graduate nurses and health care organizations.

Implications for nursing education programs

This chapter has presented the case for a postgraduate transition program for all newly licensed nurses as one aspect of improving quality and safety. Partnerships between clinical settings and schools of nursing are critical links to successful new graduate transition (Sherwood & Drenkard, 2007). Educators should be an integral part of transitioning new nurses to practice, both in preparing their students for practice and also in collaborating with practice as they plan and implement transition programs.

But what else can educators do to facilitate the transition to practice? Many already have designed excellent immersion courses, with preceptors, at the end of the program. This is highly recommended. Some worry about preceptor burnout if educational programs were to all have immersion programs at the same time that a standardized model was implemented. This would probably be the case for the first few years. However, as nurses become acclimated to being preceptored in their first year of practice, they will see the importance of "giving back" and will themselves become preceptors. After a standardized preceptor model has been implemented for a few years, it is expected that preceptors will be readily available.

Educators are strongly encouraged to develop practice partnerships where practitioners and educators can work together to design clinical and simulation experiences that will foster a more seamless transition to practice. Participating in dedicated education units is an innovative way some nursing programs collaborate with practice partners. In this model, nurse executives, faculty, and staff nurses partner to transform patient care units into supportive environments for nursing students and staff nurses, while

continuing to provide quality care to patients (Mulready-Shick, Kafel, Banister, & Mylott, 2009).

There is a movement in nursing education to transform clinical experiences from the frequent randomness that we now have to more focused learning experiences. Gabrud-Howe and Schoessler (2008) outline some new ways of delivering clinical education, including

- focused direct client care experience,
- concept-based experience,
- case-based experience,
- intervention skill-based experience, and
- integrative experience.

Berkow et al. (2008) developed 36 mutually agreed-upon competencies essential for safe and effective nursing practice. To be included on the list, the competencies had to be specific, actionable, and reflective of current hospital demands. After extensive surveys with employers and educators, the competencies (shown in Textbox 14.1) were identified as areas "needing improvement" with new graduates; at the same time, educators have reported giving these areas less emphasis. Educators and those planning transition programs, therefore, should focus on how to best incorporate those elements into their curricula. Some of them have been supported by other national research.

Textbox 14.1 Research-supported elements for transition programs. These seven competencies were cited in Berkow, Virkstis, Stewart, and Conway's (2008) research as being weaknesses of new graduates. Others have documented these competencies as being important to integrate into transition to practice programs.

- Follow-up in patient care (Benner, Sutphen, Leonard, & Day, 2010, also cited this in nursing education)
- Taking initiative
- Understanding quality improvement (Cronenwett et al., 2007, cited this as needing more emphasis)
- Completion of tasks within expected timeframes (NCSBN, 2006b, also supports this)
- Track multiple responsibilities
- Conflict resolution (Benner et al., 2010, also cites this as a weakness in nursing programs)
- Delegation (NCSBN, 2006a, cited this as needing more emphasis)

The Advisory Board Company (2008) has outlined some exemplars in clinical instruction where educators and practice partners have collaborated, and have illustrated how partnerships have helped to design outstanding clinical experiences. The exemplars presented were in the broad categories of targeted clinical rotations, expert clinical instruction, and exceptional student experiences. It makes sense for educators and nurses in practice to collaborate when educating nurses because they both have the same goal: to provide safe and high-quality patient care.

Conclusion

The evidence is increasingly clear that TTP programs are a critical element in the success of individual nurses, their organizations, and patient quality, safety, and outcomes. As a result, the support for these programs is growing (Benner et al., 2010; IOM, 2010; NCSBN, 2007). Using the NCSBN TTP model to provide guidance and direction, organizations in all health care settings can establish TTP programs. Quality and safety can only be assured if TTP programs become the expectation for every new graduate nurse.

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