CHAPTER 34

TRANSITION TO PRACTICE:
IMPROVING PATIENT OUTCOMES

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The content of this chapter relates to the following major content areas and subconcepts on the Certified Nurse Educator Examination Detailed Test Blueprint:

Facilitate Learner Development and Socialization
- Create learning environments that facilitate learners' self-reflection, personal goal setting, and socialization to the role of the nurse

Participate in Curriculum Design and Evaluation of Program Outcomes
- Maintain community and clinical partnerships that support the educational goals
- Create community and clinical partnerships that support the educational goals

Function as a Change Agent and Leader
- Enhance the visibility of nursing and its contributions by providing leadership in the nursing program; parent institution; community
- Participate in interdisciplinary efforts to address health care and educational needs within the institution; locally

Function Effectively Within the Institutional Environment and the Academic Community
- Identify how social, economic, political, and institutional forces influence nursing and higher education

Introduction

In nursing let's bring to fruition
A standardized course to transition
New nurses to practice,
Like docs, cuz the fact is
It's a safety, no-brainer position!

This chapter presents a compelling argument for developing a national, standardized program for transitioning all new nursing graduates to practice. For the purposes of this chapter, standardized **transition program** is defined as a formal program of active learning for all newly licensed nurses (registered nurses and licensed practical/vocational nurses) designed to support their progression from education

to practice across all settings (NCSBN, 2008b). **Orientation** is defined as the process of introducing staff to the philosophy, goals, policies, procedures, role expectations, and other factors needed in a specific work setting. Orientation takes place both for new employees and when changes in nurses' roles, responsibilities, and practice settings occur. (ANA Scope and Standards of Practice for Nursing Professional Development). In the healthcare workforce, nurses work the most closely, on a daily basis, with patients. It only makes sense that their transition from education to practice should be carefully orchestrated. Indeed, other health professionals, such as physicians, pharmacists, physical therapists, and those in pastoral care have standardized residency programs. Yet, the research shows that transition programs in nursing are quite variable, depending upon the setting and level of education of the graduate, and sometimes they are completely nonexistent (NCSBN, 2006b). It is the responsibility of nurse leaders in regulation, education, and practice to work together to provide all new graduates with support during their critical transition period.

What is Prompting this Movement?

Health care is becoming increasingly complex, and there is a continued need for systems thinking. Our patient population is more diverse, sicker, and older, and patients are presenting with multiple conditions. Technology is growing exponentially, and nurses are working at a "staccato" pace (Wiggins, 2006). Patients are discharged so soon that they go home with complex medical, social, and economic issues. Concomitantly, there is a nursing and faculty shortage that is predicted to continue for many more years (Clarke & Cheung, 2008).

Furthermore, medical errors are a pervasive problem in all of health care today. The Institute of Medicine has released a number of reports on patient safety issues, reporting that medical errors are the eighth leading cause of death in this country. Approximately 7,000 people die every year from medication errors alone. An incredible 42% of the respondents in a national poll reported they had been affected by a medical error, either personally or through a friend or relative. Moreover, medical errors cost about $37.6 billion per year, with $17 billion of those costs being for preventable errors (Kohn, Corrigan & Donaldson, 1999; Medical errors, 2000), thus escalating the already high cost of health care. Medical errors don't just take place in hospitals; they also occur in physician's offices, nursing homes, pharmacies, urgent care centers, and home care. While there is not much data on the extent of the problem outside of hospitals, it is likely medical errors in these settings are common. For example, in an investigation of pharmacists, the Massachusetts State

Board of Registration in Pharmacy estimated that 2.4 million prescriptions are filled improperly in that state **alone** (Medical errors, 2000).

Related to patient safety and healthcare outcomes, Orsolini-Hain and Malone (2007) propose, with convincing evidence, that we will be experiencing the "perfect storm" in nursing if we do not take action soon. She describes the "expertise gap" that we are, and will continue to be, facing in nursing. First, there are increasing retirements among experienced nurses, with an increased ratio of newly graduated nurses to seasoned nurses. The Advisory Board Company has found that new graduates now comprise over 10% of a typical hospital or health system's staff, and they predict this number will continue to grow (The Advisory Board Company, 2008a). Then there is a shortage of experienced nurse educators and insufficient research to determine best practices in nursing education. Orsolini and Hain (2007) assert this expertise gap has health policy and patient safety implications because these novice and inexperienced nurses are caring for more complex patients, under trying circumstances, as described above. According to del Bueno's (2005) studies, 50% of inexperienced RNs would miss immediate life-threatening postoperative complications. Yet, late or nonexistent recognition of patient deterioration can significantly increase patient morbidity and mortality (Kohn, Corrigan & Donaldson, 1999). Therefore, our current situation presents grave implications for the future of health care (Orsolini-Hain & Malone, 2007).

One solution toward improving patient safety and healthcare outcomes during these challenging times is to provide all nurses, across levels of education and throughout all settings, with a standardized, post-graduation transition (also termed **residencies or internships**) program. Several national reports are calling for the development of national transition programs for nursing (Benner, Sutphen, Leonard-Kahn & Day, in press; Hofler, 2008; Joint Commission, 2002; Orsolini-Hain & Malone, 2007). The international community is also working to develop standardized transition programs for their new graduates (NCSBN, 2008b). While this is a new concept to nursing, other healthcare professions have provided residency programs for years. Indeed, in medicine, pharmacy and pastoral care the programs are funded by the Centers for Medicare and Medicaid Services (CMS).

Supporting new graduates in their transition to practice is not new. It was first discussed in the 1930s, though in 1974 Marlene Kramer, in her renowned *Reality Shock: Why Nurses Leave Nursing*, crystallized the concept. Kramer described the difficulties new graduates face when they begin to work, and she termed this "reality shock." Kramer (1974, p. vii-viii) describes reality shock as "...shocklike reactions of new workers when they find themselves in a work situation for which they have spent several years preparing and for which they thought they were going to be prepared, and then suddenly find that they are not." A major reason nurses have

had difficulty moving into the workforce, Kramer says, is because of their perception of the role. While they are taught about maintaining professional standards, this is in stark contrast to the hospital's bureaucratic role where there is more emphasis on technical and administrative skills. One of the novice nurses interviewed in Kramer's book tells her story of why she was disillusioned (see Table 1). While the tasks in nursing have significantly changed since the 1970s, one can see that the context for new graduates has not.

New Graduate's Story
Kramer (1974), pp. 1-3

"The setting is a 20-bed postcardiac surgical ward of a large county hospital. It's the evening shift-about 4:30 P.M. –and you are alone because the one aide who works with you has gone to dinner. The day shift report indicates that the ward is fairly quiet and that most of the patients are status quo. All the patients on this ward are pre- or postcardiac surgery, many having been just recently transferred out of the cardiac ICU which is adjacent to the ward. You are in the process of making rounds to see all the patients. Halfway down the large open-ward is Mrs. Swape, a 52-year-old postpump patient who also works as one of the volunteers on the ward. She seems very sad and lonely, and you remember that the day nurse had remarked that Mrs. Swape had not been her usual cheerful self that day. You pause in your flurry of activity, approach Mrs. Swape, and gently cover her hand with yours. As she looks up at you, you think you detect tears welling up in her eyes. This is most unusual. During all of her past surgery, she has been very highly controlled: never crying or complaining, always saying 'thank you' to the nurses, even when you had to do painful procedures like suctioning and turning her. You've been concerned about her and this 'super' control.

Table 1. A New Graduate's Story

"Reflecting to yourself that maybe Mrs. Swape is ready to open up and talk, you gently pull the curtains around the bed and seat yourself on the edge. After a few minutes, Mrs. Swape begins to talk. She is in the middle of telling you how afraid she is-not about the operation and the surgery, but afraid the nurses on the ward won't like her anymore. It seems that a few years ago she had had surgery and had had a postsurgical psychosis that resulted in her really 'flipping-out' for a few days: pulling our IV's, NG tubes, throwing things, and screaming at the nurse and everything. She remembered this after she came out of it and was so fearful that she might do it again with this surgery, and then the nurses wouldn't like her anymore or let her come back to work on the ward as a volunteer. Mrs. Swape is in the middle of telling you this. Her face is pinched and anxious and she looks as though she will 'let go' any minute now.

"Suddenly you hear the food cart clanging through the doors of the ward. At this hospital the trays do not come up from the kitchen prepared; there are just pots of food, and the staff has to serve it on plates, construct the special low-salt diets, etc. Furthermore, the cart has to be returned to the kitchen for use on the other floors. Most of your patients are fairly recent open-heart surgery patients. They need their food, particularly the potassium. If you stay with Mrs. Swape, there's no one there to serve them the food; if you don't serve them the food and return the cart, the supervisor will call or come to the ward, and you know from past experiences that she takes a dim view of this kind of 'inefficiency.' If you leave, even for a minute, your intuition and judgment tell you that the climate will be broken and Mrs. Swape will clam up again."

Table 1 continued: A New Graduate's Story

Is it finally time for nursing to take a giant step forward and design and implement a national, standardized transition program? Obviously this initiative would have to be implemented collaboratively with nursing practice, regulation, and education. Educators are the experts in curriculum design and evaluation and will be able to assist with the design of the transition modules. Practice provides a crucial link that will equip new graduates with planned, and precepted, practice experiences. Regulators provide new graduates with information on their scope of practice, the Nurse Practice Act, and maintaining their license throughout their careers. Regulators would also have the authority to implement the model, if that is the path nursing would like to take. Besides collaborating with each other, nurse leaders would have to convince huge hospital systems, small rural community hospitals, nursing homes, legislators, large medical organizations like the American Hospital Association, policymakers, the public, etc., that this action must be taken, focusing

on the common goal we all have: safe and competent nursing care. Can nursing mount such an enormous effort? Nursing would have to come together with one voice, like never before, and articulate the necessity for this major change in how nurses are educated.

It is imperative to stress that this movement toward developing a national, standardized transition program is **not** because the education programs are failing to adequately prepare our nurses for practice. Our nurse educators are working harder, and smarter, than ever before to educate sufficient and qualified nurses during this intense faculty shortage. Nor is the need for this regulatory transition model because practice settings are failing and are expecting new nurses to hit the ground running. Many practice settings have developed their own individual programs because they are concerned about transitioning new graduates. However, the research has shown that the caliber of these programs is quite variable (NCSBN, 2006b). This need for a national, standardized transition program has arisen because of the tremendous changes we've seen in health care in the past 20 years.

The next sections will review the evidence supporting the need for standardized transition programs in improving patient safety and in promoting quality healthcare and will propose strategies for implementation.

The Evidence

While evidence-based health care is an essential foundation of any nursing model, evidence is limited at the beginning of any new initiative. Requiring substantial evidence before implementing new models can be a barrier to innovation. Therefore this review will include a variety of the available evidence, such as expert opinions/consensus statements, unpublished reports, and results from interviews with those who have implemented successful programs, as well as published research papers. This adds depth to the inquiry, though more importance should be given to properly conducted research studies, systematic reviews, or meta-analyses.

When reviewing the evidence for transition to practice (NCSBN, 2008b), Sackett's widely-accepted definition for evidence-based practice was the guide to this inquiry. Sackett describes evidence-based practice as the integration of the best research evidence with clinical expertise and patient values (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). The available evidence was identified by searching the literature systematically, as well as by contacting those who have developed transition programs to gain further insight into the evidence. The following levels of research were considered, and they are consistent with other NCSBN work (NCSBN, 2006a).

- Level I: A properly conducted randomized controlled trial, systematic/integrative review or meta-analysis
- Level II: Other studies, such as quasi-experimental, correlation, descriptive, survey, evaluation, and qualitative
- Level III: Expert opinions or consensus statements

Of the available evidence, there were several Level II and Level III studies or projects, but none were Level I. One study, by Hofler (2008) was a synthesis of national reports on transition to practice, but the methodology was not rigorous enough to consider it a systematic or integrative review. It is common in health care, health policy, and nursing research not to find randomized controlled trials because they are not always feasible or ethically possible. Expert opinions and consensus statements (such as standards by a professional organization) can be important supportive data, especially in an area as complex as transition to practice.

Safety and New Nurses

A variety of research reports link new nurses to patient safety issues, such as near misses, adverse events and practice errors (Behrens, 2000; Bjørk & Kirkevold, 1999; del Bueno, 2005; Ebright, Urden, Patterson & Chalko, 2004; Johnstone & Kanitsaki, 2006; & Kanitsaki, 2008b; Massachusetts, 2008; NCSBN, 2007a; NCSBN, 2007b; Orsolini-Hain & Malone, 2007). Behrens (2000) reviewed three million state and federal computer records for safe nursing practice, citing several statistics related to patient deaths due to all nurses (see Table 2), not just novice nurses. However, specifically related to novice nurses, Behrens (2000), after reviewing Illinois state disciplinary data, reported that temporary nurses (those filling in when nurses leave) were the increased focus of investigations; their reasons for errors were most often linked to lack of knowledge and unfamiliarity with patients. That is significant because novice nurses who do not take part in transition programs notoriously have a high turnover rate, and this will be discussed below. Therefore, when these nurses leave, they are often replaced by temporary nurses who tend to make more errors.

Two reports specifically cited disciplinary data (Massachusetts, 2008; NCSBN, 2007a) and one addressed incident reports (Johnstone & Kanitsaki, 2008b). It makes sense that there isn't going to be increased discipline for novice nurses (0-12 months) versus those in practice for 10 years, for example, because the latter group would have a much greater opportunity to make errors. New nurses are often given the benefit of the doubt when being reported for errors. 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). The NCSBN Nursys® data on discipline in the boards of nursing (NCSBN, 2007a) found that 4.1 percent of the discipline was with novice nurses. For all nurses there was a trend of increased discipline from 1996-2006, thus supporting IOM reports of an increase in practice errors in health care. The Massachusetts's preliminary findings on discipline data from 77 nursing homes (Massachusetts, 2008) had no novice RNs in the analysis. However, of 44 LPNs disciplined, seven were novices. In the Massachusetts study, the researchers concluded that errors with new nurses were linked to inexperience, lack of famil-iarity, and lack of consistent preceptors. They recommended more supervision and support for new nurses.

All Nurse Errors from 1995-2000
(Analyzed from 3 million state and federal computer records.)

From 1995 – 2000:

- At least 1,720 hospital patient deaths were attributed to nurse errors.
- At least 9,584 hospital patient injuries were attributed to nurse errors.

Some examples of the errors included:

- 418 deaths and 1,356 injuries by RNs operating infusion pumps incorrectly.
- 216 deaths and 429 injuries by RNs who failed to hear alarms of lifesaving equip-ment.
- 119 patient deaths and 564 injuries by unlicensed, unregulated nurse aides, not adequately supervised by RNs.

Table 2. Nurse Errors

A study conducted in Australia (Johnstone & Kanitsaki, 2008b) found that incident reporting increased during the novice nurse's first year in a supportive tran-sition program 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 three to four months of this 12-month program. The key indicators they used to validate this integration included new graduates' famil-iarity with:

- Hospital layout

- Hospital policies regarding risk assessment tools
- Processes of evidence-based practice
- Incident reporting

New nurses often engage in concrete thinking and focus on technology (Benner, 2005; Orsolini-Hain & Malone, 2007), thereby missing the bigger picture, and this can be devastating during these complex times in health care (Benner et al., in press; del Bueno, 2005; Ebright et al., 2004). With the increased ratio of novice nurses to seasoned nurses, as reported earlier, it is possible that novices are assisting each other, thus putting them in situations where errors in judgment are not corrected by colleagues (Ebright, 2004; Orsolini, 2007). Indeed, in a well-designed prospective study, Bjørk & Kirkevold (1999) found how 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. Four nurses were followed for eight to 14 months as they performed dressing changes and ambulated new surgical patients. The nurses only had a short orientation to their units. 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. According to Bjørk and Kirkvold (1999), the nurses were considered regular nurses, and it was assumed they knew what they were doing. There were no opportunities for feedback from expert nurses or opportunities to reflect on their practice, thus preventing them from learning from their mistakes.

Another study (Ebright et al., 2004) found that of 12 recruited new nurse participants, 7 reported at least 1 near-miss event, while 1 nurse described 2 events. Some of the themes identified related to near-misses/adverse event cases include the following:

- Clinically focused critical thinking
- Seeking assistance from experienced nurses
- Knowledge of unit and workflow patterns
- First-time experiences
- Time constraints
- Hand-offs
- Influence of peer pressure and social norms
- Losing the big picture
- Novices assisting novices

Benner et al. (in press) recommend a yearlong transition program for new nurses, in part because students do not have the opportunity to follow-up with their patients in their nursing programs. Therefore, novice nurses are often weak in detecting subtle changes in patient conditions. A supportive transition program would assist new nurses to identify subtle changes and avoid practice errors. Orsolini (2007) cites statistics showing that if new nurses fail to recognize changes in patient status, those patients can deteriorate quickly. When CPR is needed, only 27 percent of adults and 18 percent of children survive.

An NCSBN national study (NCSBN, 2007b) found that when transition programs in hospitals addressed specialty care, new nurses reported making 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.

Johnstone and Kanitsaki (2006) and Johnstone and Kanitsaki (2008b) studied integrating new nurses into clinical risk management systems in Australia. They stress the importance of not teaching new graduates deficit education. That is, do not assume the transition program needs to re-educate the new nurse. Instead, the nurse needs to learn, by experiential means and with support of qualified nurses, how to manage risks in practice. These researchers found when the new graduates were introduced to clinical risk management, none of them was involved in a preventable adverse event resulting in patient harm. Unfortunately, they did not compare these findings to new nurses who were not introduced to clinical risk management.

Competence and New Nurses

Keller (2006) provides insight as to why new nurses need continued support for the first year, even though they graduated from an approved nursing program and have passed the NCLEX®. She states that nursing education cannot prepare new graduates for acculturating into their workplace and for using a recently acquired new language. Keller goes on to assert that new graduates are expected to become skilled in a wide range of absolutely necessary skills, and gain a sense of the wider world of their organization and health care. She describes 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 (NCSBN, 2007b; Williams, Goode, Krsek & Bednash, 2007),

and stress, in the first year of practice, has been significantly related to practice errors (NCSBN, 2007b).

There is evidence linking competence to the need for effective transition programs (Benner et al., in press; NCSBN, 2008a; NCSBN, 2007b; Williams et al., 2007; Bjørk & Kirkevold, 1999; Beyea, von Reyn & Slattery, 2007; del Bueno, 2005; Orsolini-Hain & Malone, 2007). Many of the investigators have concluded that new nurses need a year of support to learn to work within complex systems. National reports have supported a need for novice nurses to revisit their actions and to reflect on alternate pathways for decision making (Benner et al., in press; Hofler, 2008; Joint Commission, 2002; NCSBN, 2006a; Williams et al., 2007). While some institutions have formal transition programs (Beecroft, Dorey & Wenten, 2008; Beecroft, Kunzman & Krozek, 2001; VNIP, 2008; Beyea et al., 2007) that are less than a year long, they often continue to provide ongoing support to new nurses for 12 months.

NCSBN (NCSBN, 2007b) reported that new graduates were significantly more likely to self-report practice errors when they also reported decreased competence and increased stress. In this study and the UHC/AACN national study (Williams et al., 2007), three to six 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). This evidence supports the vulnerable period of new graduates as three to six months after employment.

In the Bjørk and Kirkevold (1999) study, as described above, 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.

In the Dartmouth-Hitchcock transition program (Belyea, 2007), investigators measured confidence, competence, and readiness to practice, all of which significantly increased after their transition program. This program uses simulation vignettes that highlight high-risk and low-frequency events, as well as commonly occurring clinical situations. According to this study, this is a highly effective way of developing competency and confidence in new graduates.

One program that was reviewed (Mississippi, 2008) has a six-month transition program, using an interesting outcome measure that is indirectly related to patient safety and competence; they measured patient satisfaction and found a 10% increase after completion of a formal six-month transition program.

One-Year Turnover

Some might argue whether job retention is a fair measure of patient safety because, while nurses may leave one job during the first year, they generally move to another position. The first workplace, however, which may already be affected by the nursing shortage, is challenged with recruiting and orienting a new nurse. Indeed, there is significant research showing the link between high turnover and patient safety and health outcomes. Since job satisfaction is a predictor of anticipated turnover, it too is linked to healthcare outcomes (Beecroft et al., 2008).

However, there is also data showing a trend of nurses leaving nursing altogether, which affects patient safety, particularly when there are already nursing shortages. In the late 1980s only 4.5 percent of nurses were employed outside of nursing, while in 2004, 16.8 percent were (Orsolini-Hain & Malone, 2007). It is unknown how many nurses who leave the profession are new graduates. Workforce studies should focus attention in this area.

Statistics indicate that temporary nurses, who are often hired when a new nurse resigns, have an increased number of disciplinary complaints filed at boards of nursing (Behrens, 2000) compared to nurses hired on a permanent basis. These data were reported by a newspaper investigative reporter, so the results should be validated by a researcher. However, the Massachusetts preliminary data on nursing error also found that errors were often linked to lack of familiarity with the practice setting (Massachusetts, 2008). Ebright and colleagues (2004), in their investigation to identify factors leading to near-misses/adverse events in novice nurses, found that unfamiliarity with the unit and workflow patterns was one of the themes linked to error. Every study examined found that increased retention resulted from a formal transition program (Beecroft et al., 2001; Halfer, 2007; Keller et al., 2006; Mississippi, 2008; NCSBN, 2007b; Pine & Tart, 2007; VNIP, 2008; Williams et al., 2007), and these turnover rates, for the first year in practice, varied from 6 percent to 19 percent. Williams and colleagues (2007) report, from a review of the literature, that first-year turnover rates of new nurses average from 36 percent to 55 percent. The Advisory Board Company (2006) reported sample turnover rates for one year to be 36% and 75%. The data clearly support a well-planned transition program will improve the retention of new nurses in their first year of practice.

Across All Settings and All Education Levels

There is no doubt the literature and research on long-term settings and licensed/vocational nurses is not as strong as with acute care settings and registered nurses. One NCSBN report (NCSBN, 2007b) found that PN transition programs averaged 4.7 weeks in length, which is so short that it most likely would not provide any insight as to what the effect of transition on PNs would be. Other NCSBN research (2006b) again found that PNs had limited and variable transition programs.

While there are many descriptions in the literature of transition programs in acute care, exemplars of transition programs in long-term care are limited, though two statewide transition programs include long-term care sites (VNIP, 2008; Wisconsin, 2008). Personal communication with the project managers of each program has revealed that employers in the long-term care and rural settings have responded very positively to these programs. Similarly, reports of nurses in these programs have been positive, though there is no formal data on these outcomes.

One national study (American Health Care Association, 2002) showed high annual turnover of PNs and RNs in long-term care (50 percent), though this was for all nurses in long-term care, and not just new nurses. A national survey on the nursing home workforce (National Survey of Nursing Home Workforce Satisfaction, 2006) calculated priority ratings on areas for needed improvement:

1. Lower job stress
2. Management that listens
3. Management that cares
4. Training to deal with difficult residents
5. Training to deal with difficult family members

If new nurses in long-term care were to receive more support through a standardized transition program, impact on these identified priorities could be made.

There is not much data on practical nurses in long-term care settings; however, there is reason to focus attention on this area. In 25 years, it is expected that one in every four, instead of one in every six, Americans will be 60 years of age or older (Orsolini-Hain & Malone, 2007). Long-term care settings will become even more important, and some of our most vulnerable patients are in long-term care. Relying on the limited number of available studies on practical nurses and long-term care, and applying results from the acute care settings and registered nurses, it is reasonable to include all settings and all levels of education in a transition model.

Recommended Elements of Transition Programs

The research supports including eight modules in a transition model: specialty content, communication, safety, clinical reasoning, prioritizing and organizing, utilizing research, role socialization, and delegation and supervising. As Johnstone (2006) points out, these should not be taught as deficit education, meaning that they should not be presented under the assumption that students did not learn it in the first place, or did not learn it well. Instead, these concepts should be incorporated into the new nurses' experiences so they continue to learn, from preceptor role modeling, how to think like a nurse. While these could be presented separately as modules, they should be integrated throughout the transition program.

Specialty Content. Specialty content is an extremely important module because having specialty content in a transition program has been linked significantly to self-reports of lower practice errors (NCSBN, 2007b). Past work at NCSBN has found similar results (NCSBN, 2004b). Many of the reports recommended integrating specialty practice into transition programs (Beecroft, 2001; Benner et al., in press; Beyea et al., 2007; Flying Start, 2008; Halfer, 2007; Joint Commission, 2002; Keller et al., 2006; Mississipppi, 2008; Pine & Tart, 2007; VNIP, 2008). A related element is *prioritizing and organizing* one's work. Prioritizing and organizing is a part of clinical practice that is often missing in novice nurses (Halfer, 2007; NCSBN, 2004a; NCSBN, 2006a; Williams et al., 2007), most likely because of lack of experience. 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. Prioritizing and organizing was integrated throughout most of the transition programs that focused on specialty content.

Communication. Communicaiton, and particularly interprofessional communication, has been in the health education literature frequently and is essential in any regulatory model. The 2003 IOM report on Health Professions Education (Greiner & Knebel, 2003) stressed the importance of teaching healthcare students to collaborate across professions. McKay and Crippen (2008) report that in hospitals where collaboration occurs there is a 41 percent lower mortality rate than would be predicted. In other hospitals, McKay and Crippen (2008) report, where collaborative communication does not take place, mortality rates were 58 percent higher than would be predicted. Similarly, enhanced communication in hospitals has been linked to nurse satisfaction, lower costs, and greater responsiveness of healthcare providers (McKay & Crippen, 2008). Benner et al. (in press) and NCSBN (2006a) report that many nursing programs provide their students with few opportunities

for interprofessional communication. Supporting McKay and Crippens (2008), one NCSBN (2007b) study found that new nurses perceived they made significantly fewer practice errors when they reported being more competent in communication and interpersonal relationships. Most of the reports reviewed recommended a purposeful integration of communication, including interprofessional relationships, into transition programs (Beecroft et al., 2001; Beyea et al., 2007; Flying Start, 2008; Halfer, 2007; Joint Commission, 2001; Keller et al., 2006; Pine & Tart, 2007; Williams et al., 2007; Wisconsin, 2008).

Safety. Teaching *safety* is an essential part of a transition to practice regulatory model. Johnstone and colleagues (2006 & 2008b) in Australia have reported on the importance of experientially teaching risk management to new nurses, rather than providing deficit education. Cronenwett et al. (2007) using the expertise of national healthcare leaders across disciplines, have described in detail a module on safety that could be used in transition programs. This consensus opinion document, Quality and Safety Education for Nurses (QSEN), can be considered excellent evidence for this transition model. The Massachusetts Board of Nursing (2008) preliminary 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 (NCSBN, 2007b) 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., 2007; Flying Start, 2008; Halfer, 2007; Pine & Tart, 2007; Williams et al., 2007; Wisconsin, 2008).

Clinical Reasoning. Clinical reasoning, also sometimes referred to as critical thinking, is another essential part of a transition to practice regulatory model. Like most of these elements, it must be integrated through the program. As the Carnegie study (Benner et al., in press) points out, this is where nurses learn to think like a nurse. The Dartmouth program (Beyea et al., 2007) is exemplary as it uses simulation to assist novice nurses in making decisions during common clinical events or events that are uncommon, but life threatening. Transition programs that specifically report integration of clinical reasoning/critical thinking include: Beecroft et al., 2001; Halfer, 2007; Keller et al., 2006; Mississippi, 2008; Pine & Tart, 2007; VNIP, 2008; Williams et al., 2007; Wisconsin, 2008. However, interviews with project managers of transition programs indicated that all programs examined attempt to integrate clinical reasoning.

Utilization of Research. Similarly, evidence-based practice, or the **utilization of re-search** findings, needs to be addressed in transition programs as new nurses are expected to base their practice on the evidence (Cronenwett et al., 2007; Greiner & Knebel, 2003). Yet, NCSBN research (NCSBN, 2006a; NCSBN, 2007b) has shown that new nurses are weak in this area. Evidence-based practice was integral to most of the programs we had reviewed. 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. The international and national programs support incorporating the utilization of research into transition programs (Beecroft et al., 2001; Flying Start, 2008; Williams et al., 2007), as do many of the individual programs (Keller et al., 2006; Pine & Tart, 2007; Wisconsin, 2008).

Role Socialization, Delegating, and Supervising. Role socialization is a very important part of this model. New nurses must have a good understanding of their scope of practice, as well as that of others on the healthcare team. Role socialization has been studied by O'Rourke (2006) for a number of years, and she has developed a program and some metrics for measuring outcomes. Role socialization was an integral element of many of the transition programs we reviewed (Flying Start, 2008; Keller et al., 2006; Kentucky, 2008; Pine & Tart, 2007; VNIP, 2008; Williams et al., 2007). Closely related to this is the need for new nurses to develop a better understanding of delegating and supervising. NCSBN studies of new nurses, since 2002, consistently find that new nurses report a lack of understanding of delegation (NCSBN, 2004a; 2006a; 2007b; 2008a). NCSBN's position paper on delegation and supervising would be helpful for this module (NCSBN, 2005). Transition programs may be incorporating delegation/supervising into their curricula, though not many specifically indicate that. Only the Wisconsin Nurse Internship Program (Wisconsin, 2008) and the UHC/AACN (Williams, 2007) model identified delegating and supervising as elements of their model.

Preceptor-Nurse Relationship. The evidence was overwhelming that transition-to-practice programs are most successful when they incorporate the use of preceptors, in a one-to-one relationship. All the programs detailed on our Evidence Grid (NCSBN, 2008b) used the preceptor model. Past research at NCSBN (NCSBN, 2004b) has shown that transition programs are more effective when the new nurse works with one preceptor with the same working hours. In the Massachusetts study (2008) of nursing errors, one practical nurse commented that during her orientation to the unit, she "worked with three different nurses on three different days" after which she worked alone and was encouraged to ask questions of other nurses

as needed. This will not allow for the consistent feedback that is so essential to this model.

The evidence also supports the preceptors be skilled in the role. In many transition programs, orienting preceptors to the role is important; however, the Vermont Nurse Intern Program (2008) is an exemplary model of preceptor education. They have developed this model since the beginning of their initiative in 1999 and they now credential all their preceptors. There are also other models available in the literature (Nicol & Young, 2007). 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). An online preceptor course, with credentialing, also has been successfully accomplished (Phillips, 2006).

In areas where preceptors are not available (very small workplaces, remote geographic areas, or organizations with preceptor burnout) a national Web site could be designed to connect preceptors, through a remote interface, to novice nurses. This innovative approach has been successfully implemented in Scotland's program (2008) and could provide new nurses with opportunities for feedback, reflection, and support even when preceptors are not geographically available.

Once a national transition model is implemented and all nurses are precepted, it is expected the culture of nursing will change. Nurses will see precepting as an important part of their role, and it is anticipated facilities will no longer experience "preceptor burnout," or a shortage of available preceptors.

Feedback and Reflection

Feedback and reflection are important threads in this model and should be formally maintained during the six-month transition program, as well as during the six months that follow. Bjørk and Kirkevold's (1999) longitudinal study, discussed earlier, showed the importance of feedback and reflection. If new nurses do not receive feedback on their practice, along with an opportunity to reflect, their practice will not improve. As happened in Bjørk and Kirkevold's 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., 2007; Flying Start, 2008; Halfer, 2007; Keller et al., 2006; NCSBN, 2006a; Pine & Tart, 2007; Williams et al., 2007; Wisconsin, 2008). For fostering reflection, journaling and personal inventories were described as successful strategies.

Length of Program – Six Months with Continued Support for One Year

Two comprehensive national studies of transitioning new nurses to practice (NCSBN, 2007b; Williams, 2007) using different populations, different methodologies, and different tools, each came to the same conclusion: the three to six month period, after hire, was the most vulnerable time for new graduates. Halfer et al. (2008) found similar results. In the NCSBN study, it was most likely because this is when the new nurses began to practice independently. In this study new graduates reported more stress in the 3 to 6 month period of practice, and, interestingly, they perceived less competence at 3 to 6 months than in the 0 to 3 month period. In the UHC/AACN study (Williams et al., 2007) the authors believe this is because during the first six months in practice, many new nurses have specialty classes and might be feeling overwhelmed by the amount they must learn. This would be similar to the phenomenon of reality shock that Kramer (1974) described. Because of this strong evidence (Benner et al., in press; California Institute, 2008; Ebright et al., 2004; Flying Start, 2008; Halfer, 2007; Keller et al., 2006; Lynn, 2007; Orsolini-Hain & Malone, 2007; Pine & Tart, 2007; Sir Charles, 2008; Williams, 2007; Wisconsin, 2008) an effective transition program should last at least six months with institutional support for one year. Interestingly, even in the programs that were less than one year in length (Beecroft et al., 2001; Beyea et al., 2007; VNIP, 2008), project directors indicated (via personal communication) that often there was continued support after the program ended, and in some cases the preceptorships continued. In one instance, this was not the case. The Kentucky (2008) regulation is for 120 hours of practice, and continued support is not included in the law.

Johnstone, Kanitsaki, and Currie (2008a) from Australia have written extensively on providing support to new graduates. They define support as "a process that aids, encourages, and strengthens and thereby gives courage and confidence to a new graduate nurse or a group of new graduates to practice competently, safely, and effectively in the levels and areas they have been educationally prepared to work" (p. 53). Some of the components of support, according to Johnstone and colleagues (2008a), include being available and approachable; being able to ask questions without being ridiculed; being prompted to engage in best practices; providing benevolent surveillance, which is keeping an eye on the new graduate; providing constructive feedback and reflection; and having backup when there are problems. Formalized support systems should be built into the last six months of the new nurse's transition program.

Putting It All Together

If there were consensus within the nursing community to implement a regulatory model for transitioning new graduates to practice, that model could incorporate the evidence-based, best practices that were presented above. See Figure 1 for what it might look like. This model (Figure 1) was designed to be flexible so there are many different ways of implementing the model, depending on the organization, the area of the country, the type of setting, availability of preceptors, and other factors. For example, a large urban medical center might want to partner with a local nursing program to develop their transition program. In a small rural community hospital, however, new graduates might use a national Web site for connecting to preceptors and delivery of the modules. Both institutions would meet the criteria set forth in the model, but how they accomplished that would be very different. Similarly, the model has been designed to be robust; that is, it will include all levels of prelicensure education, from practical nurse education through baccalaureate education. All our patients deserve a nurse who has been effectively transitioned to the nursing role. Please see Appendix 1 for a detailed description of using a regulatory model to transition new nurses to practice.
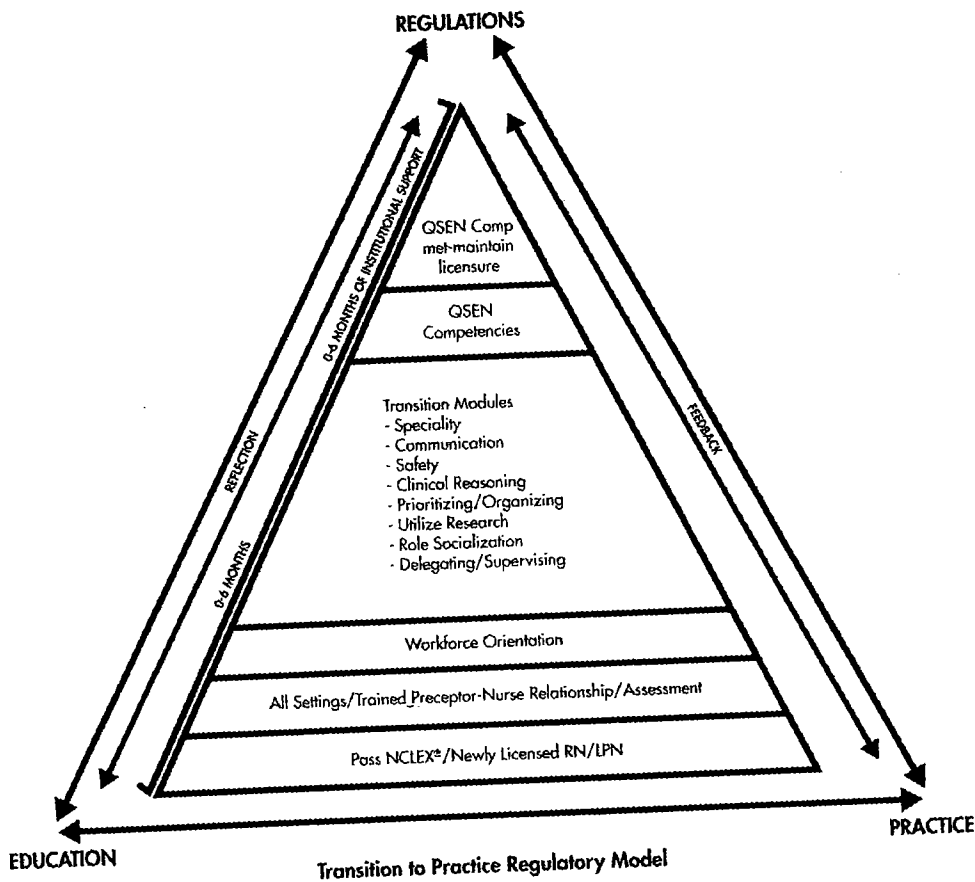
REGULATIONS

QSEN Comp
met-maintain
licensure

QSEN
Competencies

Transition Modules
- Speciality
- Communication
- Safety
- Clinical Reasoning
- Prioritizing/Organizing
- Utilize Research
- Role Socialization
- Delegating/Supervising

Workforce Orientation

All Settings/Trained Preceptor-Nurse Relationship/Assessment

Pass NCLEX®/Newly Licensed RN/LPN

0-3 MONTHS OF INSTITUTIONAL SUPPORT

REFLECTION

0-6 MONTHS

FEEDBACK

EDUCATION

PRACTICE

Transition to Practice Regulatory Model

Figure 1. Regulatory Model for Transitioning New Graduates to Practice

This is a work in progress. Please check the ncsbn.org website for revisions.

The Cost Issue

Cost of transition programs is an area of concern and warrants consideration. Several of the reports (NCSBN, 2008b) have addressed cost factors, and, when the organizations consider the cost of turnover in the first year of practice, return on investment reports have all been positive. Return on investment (ROI) is a com-

parison of net financial improvements to the cost of the program. The formula for this calculation equals net program benefits (i.e., consider turnover costs) divided by program costs. The Joint Commission (2002) reports that it costs $46,000 to replace a medical/surgical nurse and $64,000 to replace a critical care nurse. Program costs (Keller et al., 2006) include staff, office supplies, speakers, photocopying, journal subscriptions, refreshments, texts, etc. One study looking at the ROI found an 884.75 percent ROI (Pine & Tart, 2007), while another found an ROI of 67.3 percent (Beecroft et al., 2001). Keller and colleagues (2006) estimated that it cost them $1,000 per resident in the internship program, while replacing one nurse was $60,000. The Mississippi Nurse Residency Program (2008) reported a savings of over $4 million with their six-month residency program through the elimination of agency/travel nurses. Further, they saved $1.1 million through decreased turnover. Similarly, the Children's Memorial Hospital (Chicago) yearlong residency (Halfer, 2007) saved that hospital $707,608 per year. The Transition to Practice Committee found no studies of transition programs that found a negative ROI. While there have been no studies on transition programs in long-term care, their turnover rates are as high as those in acute care, and it makes financial sense that they would also benefit by transition programs.

Nursing might be able to receive some money from the Center for Medicare and Medicaid Services (CMS) if we design a standardized, national program to transition new nurses to practice that is inclusive of all new nursing graduates. As mentioned earlier, other healthcare disciplines receive CMS funding for their standardized residency programs, so nursing should vie for this money as well. There may be other federal funding, at least for the beginning stages of designing and implementing this initiative. It is also important for nursing to continue to analyze the costs of transition programs, and this is especially important in long-term care.

Implications for Educators

This chapter has presented the case for a post-graduate transition program for all newly licensed nurses. Educators, as has been emphasized throughout this chapter, should be an integral part of this design because if it is not collaboratively designed, it will not work.

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 precepted 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 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 foster a more seamless transition to practice. There is a movement now to transform clinical experiences from the oftentimes randomness that we now have to more focused learning experiences (Tanner, 2008). Tanner outlines some new ways of delivering clinical education, including:

- Focused direct client care experience
- Concept-based experience
- Case-based experience
- Intervention skill-based experience
- Integrative experience

The Advisory Board Company (2008a) developed 36 (See Table 3) mutually agreed upon competencies essential for safe and effective nursing practice. To be included on the list, they had to be specific, actionable, and reflective of current hospital demands. After extensive surveys with employers and educators, the following competencies were identified as areas "needing improvement" with new graduates. Educators, therefore, might want to focus on how to best incorporate the following into their curricula. Some of them have been supported by other national research.

- Follow-up (Benner et al., in press, cites this as lacking in nursing education)
- Initiative
- Understanding quality improvement (QSEN, 2008, has cited this as needing more emphasis)
- Completion of tasks within expected timeframes
- Track multiple responsibilities
- Conflict resolution
- Delegation (NCSBN, 2006a, has cited this as needing more emphasis)

This Advisory Board Company (2008b) has outlined some exemplars in clinical instruction where educators and practice partners have collaborated, and they have illustrated how partnerships have helped to design outstanding clinical experiences. The exemplars they presented were in the following broad categories:

- Targeted clinical rotations
- Expert clinical instruction

- Exceptional student experiences

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Thirty Six New Graduate Competencies
(The Advisory Board Company, 2008a)

Clinical Knowledge
- Understanding the principles of evidence
- Understanding of the principles of evidence-based practice
- Knowledge of pathophysiology of patient conditions
- Knowledge of pharmacological implications of medications
- Interpretation of physician and interprofessional orders
- Compliance with legal/regulatory issues relevant to nursing practice
- Understanding of quality improvement methodologies

Technical Skills
- Conducting patient assessments (including history, physical exam, vital signs)
- Documentation of patient assessment data
- Conducting clinical procedures (e.g. sterile dressing, IV therapy, etc.)
- Utilization of clinical technologies (e.g. IV Smart Pumps, medical monitors, etc.)
- Administration of medication
- Utilization of information technologies (e.g. computers, EMRs, etc.)

Critical Thinking
- Recognition of changes in patient status
- Ability to anticipate risk
- Interpretation of assessment data (e.g. history, exam, lab testing, etc.)
- Decision making based on the nursing process
- Recognition of when to ask for assistance
- Recognition of unsafe practices by self and others

</div>

Thirty Six New Graduate Competencies

Communication
- Rapport with patients and families
- Communication with interprofessional team
- Communication with physicians
- Patient education
- Conflict resolution
- Patient advocacy

Professionalism
- Ability to work independently
- Ability to work as apart of a team
- Ability to accept constructive criticism
- Customer service
- Accountability for actions
- Respect for diverse cultural perspectives

Management of Responsibilities
- Ability to keep track of multiple responsibilities
- Ability to prioritize
- Delegation of tasks
- Completion of individual tasks within expected timeframe
- Ability to take initiative
- Conducting appropriate follow up

Table 3 continued: Graduate Competencies

Summary

Currently there is no national standard for transitioning new nurses from education to practice, and few states have regulations for the process of developing novice nurses as they enter the practice arena. Medicine has standardized accredited residency programs that are required of all new medical school graduates before they can be licensed. Physical therapy, pastoral care, and pharmacy have national, standardized residency programs that are accredited, although voluntary.

Internationally, Portugal and Ireland (NCSBN, 2008b) are in the process of developing a national transition program to be implemented through regulation. Dr. Johnstone from Australia has indicated they are developing a national, standardized transition program (personal communication). Canada (NCSBN, 2008b) has

developed an excellent guide to preceptorships and mentoring, though they do not have a national model. Scotland (2008) has been a leader in designing a national, standardized transition program, and their Web-based model has inspired the vision for designing a Web site for a national transition model in the United States. Scotland is still in the process of collecting outcome data.

Through collaboration with nursing education, practice, and regulation, nursing can make this happen as long as we focus on our shared goal of providing safe and effective patient care and do not let organizational agendas get in the way.

Learning Activities

1. Compare the transition model in this chapter with the one described in Chapter 106. How are they the same? How are they different?
2. What barriers do you believe may prevent the regulatory model for transition to practice from occurring? How might those barriers be addressed?
3. Select three important issues described in this chapter. What role would faculty at a school of nursing play in addressing these issues?

Educational Philosophy

I believe more of our resources should be used to teach undergraduate nursing students. These are our nurses of the future. Too often in nursing education our best and brightest teach in graduate programs. I also believe that all nursing students should have outstanding clinical experiences and teachers because that is where much of the learning takes place. — Nancy Spector

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