MEETING THE NEEDS of hospitalized Americans requires providers, administrators, and consumers recognize that sufficient well-qualified registered nurses (RNs) are essential, RNs compose 54% of the health care labor force (U.S. Department of Labor, 2002). Recruiting, transitioning, and retaining newly graduated RNs (NGRNs) represents an efficient way of meeting nursing workforce needs; however, between 30% and 60% of NGRNs change employment locations within the first year of service (Bowles & Candela, 2005; Delaney, 2003). Even though many NGRNs leave one organization to take similar jobs in another facility, this revolving door of employment hampers their development and costs organizations approximately $80,000 to replace a RN (Jones, 2008). Initial work experiences form crucial events for NGRNs and a thoughtful, systematic transition program can significantly improve retention and productivity. Evidence suggests using clearly defined onboarding structures is more likely to result in NGRNs developing effective clinical judgment and enhanced communication skills as well as improved retention (Brady, Molzen, Graham, & O’Neill, 2006; Jeffries, 2006; Radhakrishnan, Roche, & Cunningham, 2007).

The first 3-12 months of NGRN employment is a perilous and stressful time, with experiences during the transition period profoundly influencing their careers. Workplace experiences represent different priorities and are often in conflict with what student nurses learn in educational

**EXECUTIVE SUMMARY**

- While providers, consumers, and administrators recognize the need to attract and retain nurses, recruiting, transitioning, and retaining new graduate nurses (NGRNs) remains problematic.
- The first 3-12 months of NGRN employment is a perilous and stressful time, with experiences during the transition period profoundly influencing their careers.
- The purpose of this project was to develop a dedicated transition unit using a theory-driven approach.
- It addressed employee onboarding and practice environment issues and it focused on attracting and retaining experienced and newly graduated RNs on an active inpatient unit.
- Implications are described for those interested in improving the work environment for hospital nurses.

**NOTE:** This project was made possible by a grant from the St. Joseph’s Foundation.
settings. To take on the working RN role, new graduates need organizational support, clinical learning support, and social support (Bowles & Candela, 2005; Bratt, 2009; Casey, Fink, Krugman, & Propst, 2004).

The work environment influences RN effectiveness and job satisfaction. Influential work environment characteristics include adequate staffing, access to resources and information, and control over clinical practice (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Kramer & Schmalenberg, 2004). Nurses’ job satisfaction is connected to their ability to deliver high-quality care, with control over practice decisions linked to quality care delivery (Kramer & Schmalenberg, 2004). The purpose of this project was to develop a dedicated transition unit (DTU) using a theory-driven approach. It addressed employee on-boarding and practice environment issues and it focused on attracting and retaining experienced and newly graduated RNs on an active inpatient unit.

**Theoretical Framework**

This project used Donabedian’s (1980) paradigm of structure-process-outcome as a guide to address gaps in the literature. Figure 1 graphically represents project elements including personnel and practices that formed the elements of the work environment. Project elements are described below.

**Structures**

*Unit geography and personnel.* The unit used for this project is a 21-bed medical/surgical telemetry unit in a large, urban hospital in Phoenix, AZ. Patient rooms are all private along a single hallway, with connection to a centralized telemetry monitoring station and centralized and mobile charting stations. Daily assignment for a staff nurse is four patients to one RN, with additional patient care hours delivered by assistive personnel. Staff members consist of 35 RNs, two health unit secretaries, and seven unlicensed patient care technicians. Of the RNs on the DTU, 66% are baccalaureate-prepared (n=23) and 34% are associate degree prepared (n=12). Average unit tenure for the RN staff is 5.4 years. Nursing leaders consist of a manager and a clinical supervisor for each 12-hour shift.

*Clinical scholars.* Since the literature clearly described the critical nature of the preceptor for NGRN transition, seasoned staff nurses were selected who had a passion for teaching. To distinguish the role, we selected the title of clinical scholar (CS). Table 1 outlines the characteristics we sought. Interested nurses completed an application and interview process, with those selected (N=11) demonstrating a willingness to accept the responsibility for teaching and for their own development as teachers.

Even though each of the CSs had previously received hospital-based preceptor training, they had five additional lessons aimed at advancing clinical teaching skills, with emphasis on facilitating the NGRN’s clinical judgment skills. Topics included in the course are listed in Table 2, with elements showing consistency with extant literature (Boyers, 2008). The five
lessons provided opportunities for asynchronous learning using the BlackBoard™ course management system that allowed information sharing. Benefits from asynchronous e-learning include ability for learners to access course materials at any time, opportunity for interaction among participants, chance to reflect so that learners can address complex issues, and ability to track how and when learners examine materials.

By developing a grid outlining expected characteristics, CSs could assess their own progress as clinical teachers. The grid consisted of four categories (communicating, questioning, responding, and prioritizing) to delineate teaching strategies and three standards (outstanding, acceptable, unacceptable) to rate the quality of interactions. The grid was also used to more clearly articulate the expectations for staff members.

**Human patient simulation.** Our project incorporated high-fidelity Human Patient Simulation (HPS) since the technique has shown promise in teaching cognition (HPS) since the technique has fidelity Human Patient Simulation (HPS) since the technique has shown promise in teaching cognition (HPS) since the technique has shown promise in teaching cognition (HPS) since the technique has shown promise in teaching cognition (HPS) since the technique has shown promise in teaching cognition (HPS) since the technique has shown promise in teaching cognition (HPS) since the technique has shown promise in teaching cognition. High-fidelity HPS emphasizes interactive (rather than passive) learning and provides a risk-free environment for learners. Through the HPS laboratory, experiences were provided with gradually increasing complexity with four scenarios selected, based on their relevance to the hospital’s patient population and the likelihood of facilitating clinical judgment for NGRNs. NGRNs participated in HPS experiences every 2 weeks during their orientation and CSs guided the experiences. An evaluation of the HPS process occurred after each session through use of videotapes of the session, and the NGRNs progressed through the scenarios with increasing confidence and competence.

**Advanced practice nurse.** A master’s-prepared nurse educator was hired to facilitate professional growth both for NGRNs and CSs. Skills of the advanced practice nurse (APN) included advanced knowledge of educational theories/strategies and exemplary communication skills including an approachable, non-threatening, and organized manner. For the CSs, the APN managed the education sessions, and used thought-provoking questions to guide the group into a deeper examination of principles taught. The APN conducted regular meetings with each new graduate nurse and each CS to identify perceptions and concerns. From these meetings the APN was able to facilitate a development plan tailored specifically to the learning needs of each new nurse. For the NGRNs, the APN coordinated work schedules and worked with preceptors and managers every week for the first 4-6 weeks of orientation. To accomplish the coordination tasks, the APN had to maintain a flexible schedule.

**Processes**

**Staff retreat.** To achieve an environment focused on clinical care and new employee welcoming, a day-long retreat was held to introduce the project and to obtain nurses’ informed consent. A focus group of staff members had met earlier to clarify the professional values shared by the work group. The retreat allowed staff members to discuss ways to retain these values while moving toward a refined version of the work group. Staff members choose three work groups focused on creating a welcoming environment, improving communication, and peer recognition. Activities also focused on team building, information sharing about the unit’s quality measures, and conflict management strategies. The retreat served as a catalyst for staff members to take ownership of their work environment and the outcomes of this gathering continue to fuel process changes on the work unit.

**Implementation.** Introduction of the DTU process occurred for NGRNs as part of new employee orientation. The APN contacted

### Table 2.
Clinical Scholar Learning Sessions

<table>
<thead>
<tr>
<th>Topic</th>
<th>Learning Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning styles, principles of adult learning</td>
<td>Identify strengths and weaknesses as a clinical educator. Distinguish characteristics of new graduate nurse transition that can influence learning. Applying principles of adult learning to a clinical learning context.</td>
</tr>
<tr>
<td>Assessing learning needs</td>
<td>Develop a framework for assessing learner’s current skills. Identify strategies to facilitate individual clinical learning.</td>
</tr>
<tr>
<td>Creating a development plan</td>
<td>Distinguish learning goals. Define strategies to engage the learner. Refine expected learning outcome(s).</td>
</tr>
<tr>
<td>Giving effective feedback</td>
<td>Analyze elements of effective feedback. Compare approaches to providing feedback.</td>
</tr>
<tr>
<td>Improving communication skills</td>
<td>Distinguish essential strategies for communicating effectively with co-workers. Define non-verbal cues that indicate communication success.</td>
</tr>
</tbody>
</table>
eligible individuals during their first day at the facility to clarify expectations and to describe next steps in the process. Each NGRN shadowed a clinical scholar for one shift then, as the new nurse’s abilities develop, he/she assumed responsibility for a greater number of patients, with each NGRN capable of managing a full patient load (four patients) by week 4 of orientation. To ensure consistency, each NGRN worked with only one or two clinical scholars through the DTU period. The APN facilitated weekly updates with the NGRN and his/her clinical scholar, with emphasis on evaluating confidence with skills, decision making ability, communication with providers, and ability to manage workload. From these meetings the APN devised a development plan tailored specifically to the learning needs of each new nurse. NGRNs participated in HPS experiences of progressing complexity every 2 weeks during their orientation (total of four), with clinical scholars guiding the experiences. An evaluation of the HPS process occurred after each session, through use of videotapes, debriefing, and reflection. At the completion of 4 weeks on the DTU, NGRNs completed orientation with a preceptor on their home units. The orientation period ranges from 8-12 weeks, depending on the NGRN’s abilities and development, and the APN meets with each new nurse monthly for at least 1 year.

Outcomes

The demonstration project focused on the system of care delivery, with evaluation elements related to staff nurses, new graduate nurses, and patients. Each of the evaluation components is described below.

Staff nurse outcomes. To determine if nurses work satisfaction improved, subscales of the Essentials of Magnetism (EOM) scale (Kramer & Schmalenberg, 2004) were used to evaluate staff nurses’ perceptions. The 65-item EOM scale has demonstrated validity and reliability (α = 0.89, 0.90). Concepts included RN-MD collaboration, autonomy, and control over practice. The EOM instrument, most frequently used in evaluating organization’s readiness for Magnet™ designation, outlines a clear link between autonomy and control over practice as important determinants of job satisfaction and retention. Table 3 displays the pre and post-implementation survey results, with comparison scores from Magnet-designated facilities. There were increases in each area from pre to post-impementation. In addition, nurses on the DTU perceived their levels of autonomy and control over nursing practice at a somewhat higher level than those of nurses working in Magnet hospitals.

RN absenteeism was included as an evaluation component, since other investigators have demonstrated a link between absenteeism and work-related stress (Hall, 2007; Stone, Du, & Gershon, 2007). The absentee rates for DTU RNs were reduced by 19% (504 hours, compared to 624 hours the prior year), suggesting decreased work stress, even though workload increased somewhat during this project. These results alone indicate a positive trend for the project.

New graduate nurse outcomes. Monitoring of NGRNs’ progress took many forms. Clinical scholars on the DTU assessed the new nurses every week regarding confidence in performing clinical skills, decision-making ability, ability to manage workload, and comfort in receiving feedback and communicating with physicians, with specific areas for growth identified every week. Evaluation of the NGRNs’ skills and problem-solving abilities within the HPS scenarios provided another source of feedback for the learners. At the end of the DTU experience, Lasater’s Clinical Judgment Rubric (Lasater, 2007) was used as part of the evaluation of each NGRN’s development, specifically for its focus on judgment development. Unit-specific skills lists were also used to ensure the NGRNs demonstrated expected clinical skills.

As of the time of writing, at the end of 6 months, 94% of the 30 DTU NGRNs remained with their employer. Preliminary analysis of qualitative data indicates the DTU experience helped NGRNs develop manual and cognitive skills and to establish routines of care. Satisfaction with the on-boarding experience was high among NGRNs, with each RN committing to further development and indicating intention to remain with the hospital.

Patient outcomes. Patient outcomes of satisfaction with care and condition-specific quality goals showed slight improvements over the course of the project. This project focused on patients’ satisfaction with nursing care, anticipating that any changes to the nursing care

Table 3. Staff Nurse Perceptions

<table>
<thead>
<tr>
<th></th>
<th>Pre-Implementation (n=24)</th>
<th>Post-Implementation (n=22)</th>
<th>Magnet Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN-MD relationships</td>
<td>41.88 (SD = 6.74)</td>
<td>42.32 (SD = 5.93)</td>
<td>43.88 (SD = 7.94)</td>
</tr>
<tr>
<td>Autonomy</td>
<td>78.88 (SD = 8.70)</td>
<td>79.09 (SD = 8.52)</td>
<td>76.57 (SD = 12.28)</td>
</tr>
<tr>
<td>Control of nursing practice</td>
<td>72.24 (SD = 11.41)</td>
<td>73.86 (SD = 3.11)</td>
<td>71.63 (SD = 13.47)</td>
</tr>
</tbody>
</table>
The findings from this project have implications for nurse executives and nurse faculty. According to Berkow, Virkstis, Stewart, and Conway (2008), only about 10% of nurse executives agree that new graduate nurses are prepared to provide safe and effective care, while nearly 90% of nurse faculty members agree. Because both groups of leaders are concerned with preparation and integration of new nurses into the workforce, project results suggest changes in approaches are needed for leaders in both arenas.

Nurse faculty need to develop ways to more accurately shape students’ expectations and skills regarding their abilities and to provide time and guidance for discussion and reflection related to the often overwhelming aspects of actually working as a nurse. While health care organizations do not expect NGRNs to function at an expert level, new nurses must be able to demonstrate beginning skills upon graduation. Basic abilities in psychomotor and critical thinking skills remain clear imperatives for nurse faculty. The NGRNs who participated in this project experienced a significant drop in confidence in the early weeks of hospital orientation, with a gradual increase in confidence over the following 6-8 weeks. During focus group discussions, many indicated that impressions received during their education led them to believe they would be able to undertake a full patient load without difficulty soon after graduation and, when they were unable to do so, it was a time of near crisis for them.

Nurse executives need to support consistent and comprehensive on-boarding processes for NGRNs and not consider these fluff or non-productive expenses, but an organizational imperative in the current health care environment of increasing acuity of hospitalized patients, shortened lengths of stay, and increased responsibility for vigilance. Limited clinical education time coupled with inappropriate expectations (whether stated or implied) that the new graduate nurse is capable of handling a patient assignment with only a few weeks of orientation, results in significant stress and feelings of inadequacy among NGRNs. Flexible orientation lengths are needed since the ability to function without assistance or preceptship seldom occurs in less time than 1 year. By investing in programs such as the one described in this article, it is more likely new nurses will develop the skills and judgments needed to become fully functioning professionals.

Further, project results show it is insufficient to provide only preceptor training or didactic classes for NGRNs, since these are isolated activities rather than a program. It is only by providing integrated experiences within a functioning unit, combined with supportive and welcoming colleagues, that new nurses can reach beginning competence. While economic conditions could account for the NGRN retention rate reported for the project to some extent, no such factors influenced the changes seen in the attitudes and efforts of seasoned staff members. By investing in work group

**Figure 2. Cost Savings Attributable to DTU**

| Retention Before | 30 NGRNs x 0.6 | = 18 RNs |
| Retention After  | 30 NGRNs x 0.94| = 28 RNs |
| Total Savings    | 10 RNs x $80,000 = $800,000 |

process might influence satisfaction levels. With nearly 300 patients responding, satisfaction with nursing care overall improved slightly (pre=91%, post=93%), with greatest improvement seen with responses to the item “The nursing staff anticipated my needs very well” (91% before, 98% “very satisfied” after). Clinical outcomes for patients with acute myocardial infarctions showed improvement from 95% compliance with guidelines before the project to 96% compliance after the project. Results for patients admitted with congestive heart failure were similar (pre=90%, post=95% compliance).

**Cost-Benefit Analysis**

Costs associated with the project include APN salary and staff nurses’ salaries for faculty education time and for the retreat. Total estimated costs for the project were $150,000. The DTU project resulted in improved retention of 10 more NGRNs than the previous process. The estimated savings to the organization, depicted in Figure 2, total $800,000, providing an estimated ratio of costs to benefits at 1:5.

**Implications for Nurse Executive and Nurse Faculty**

The results of this project suggest our original model was effective in achieving goals of retention and development of NGRNs and in enhancing perceptions of seasoned staff members. Nurses, both new and seasoned, perceived enhanced respect and support, with subsequent indications of organizational commitment. The payoff for the project was reflected by one of the NGRNs who said: “The environment, the way the workers are, you know, everyone’s real nice to you; nobody puts you down [just because you’re] a new grad. I don’t know if it’s the training that they do there, but, for me, it made all the difference.”

The environment, the way the workers are, you know, everyone’s real nice to you; nobody puts you down [just because you’re] a new grad. I don’t know if it’s the training that they do there, but, for me, it made all the difference.”

**Figure 2. Cost Savings Attributable to DTU**

| Retention Before | 30 NGRNs x 0.6 | = 18 RNs |
| Retention After  | 30 NGRNs x 0.94| = 28 RNs |
| Total Savings    | 10 RNs x $80,000 = $800,000 |
transformation, the DTU process resulted in a cohesive, collaborative, and welcoming work group that continues to see improvements in care quality and patient satisfaction. Staff members and leaders of the unit participated in creating the environment and clearly took pride in their efforts to grow colleagues with whom each would want to work. From the perspective of the NGRNs, the crucial role of the APN as an unfailing support carries great weight. The APN, who served as a non-judgmental professional guide, suggests organizations that invest in such a position can realize significant savings.

REFERENCES

ADDITIONAL READINGS