

I. EXECUTIVE SUMMARY

A. Introduction

Recognizing the wealth of clinical expertise, organizational knowledge and judgment that experienced nurses bring to the patient bedside, the Robert Wood Johnson Foundation (RWJF) is collaborating with hospitals, health systems and nursing leaders to develop and disseminate "best practice" programs designed to improve retention of experienced hospital nurses.

In 2006, RWJF commissioned a white paper, *Wisdom at Work: the Importance of the Older and Experienced Nurses in the Workplace* that identified strategies intended to contribute to the retention of experienced nurses, and recommended that resources be invested to test those strategies.¹ The Foundation supported that recommendation by funding the "Wisdom at Work: Retaining Experienced Nurses Research Initiative."

Under the initiative, RWJF provided grants averaging about \$75,000 each to 13 pre-existing hospital-based initiatives largely focused on improving experienced RN retention. The primary purpose of these grants was to evaluate the outcomes of each initiative through the collection and analysis of key performance data. In addition to trends in experienced RN turnover rates, other nursing-related outcomes examined included the average direct costs of RN turnover and trends in RN patient handling injuries and hospital disability costs for hospitals with ergonomic initiatives.

The Lewin Group (Lewin) was commissioned by RWJF to serve as the National Coordinating Center and evaluator for the initiative. Responsibilities included coordinating and conducting the evaluation, providing technical assistance to grantees in data collection, conducting data analysis to identify program outcomes, success factors and lessons learned that influenced those outcomes and coordinating the 2007 and 2008 annual convening's of grantees at the Foundation.

This evaluation was carried out between January, 2007 and December, 2008. The first 18 months (January, 2007-June, 2008) focused on providing evaluation coordination and technical assistance services to participating organizations and collecting and analyzing performance data. The final six months (July-December, 2008) focused on data synthesis and development and presentation of evaluation findings.

B. Key Evaluation Findings

Findings are briefly summarized below. A more comprehensive presentation of all evaluation findings is provided in the main body and appendices of the evaluation report.

Trends in Pre- and Post-Intervention Experienced RN Turnover

Grantee initiatives focused on three types of work place adaptations intended to improve experienced RN retention: 1) Those testing evidence-based ergonomic workplace redesign

¹ White paper sources included published literature and interviews with individuals with expertise in health care systems design, executive leadership and management, patient-centered care and safety and labor relations.

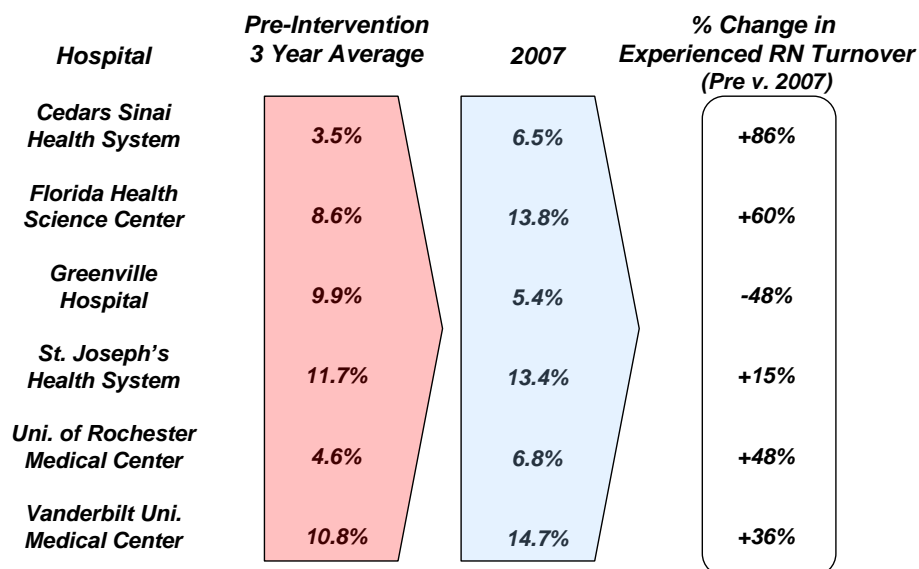
approaches; 2) Those testing the impact of new clinical information technologies; and 3) Those testing the impact of human resource-related strategies, including staffing models, leadership development and other initiatives designed to transform organizational culture. To assess the impact of these initiatives, grantee turnover rates were tracked for all RNs and for experienced RNs (age 45 and older) for the three years prior to each intervention and compared to 2007, the most recent period for which post-intervention data was available.

When examined across the board, the 13 grantee initiatives appeared to have little positive impact on RN turnover. Experienced RN turnover rose from a pre-intervention average of about 8.0% to 8.6% in 2007, while turnover across all RNs grew slightly from about 12.1% to 12.3%. However, turnover varied greatly across the three types of grantee retention initiatives, as follows:

Ergonomic initiatives (n=6): Six grantees focused on ergonomic work place redesign programs, such as patient lift teams and equipment designed to reduce physical practice burdens. Among these initiatives average experienced nurse turnover increased from 6.8% to 10.3% (Figure 1). These findings suggest that although improved retention may be a goal, it may not be a primary outcome of many ergonomic initiatives. Since their implementation, the primary outcomes of these six ergonomic initiatives also included reducing the number of RN days lost due to work related injuries by 89% and lowering hospital disability costs associated with patient handling injuries by 28%. These outcomes were consistent across grantees and speak to the effectiveness of this model in improving hospital performance in areas other than experienced RN retention.

Greenville Hospital System's safe patient handling initiative was a notable exception to these findings by reducing its experienced RN turnover by almost half.

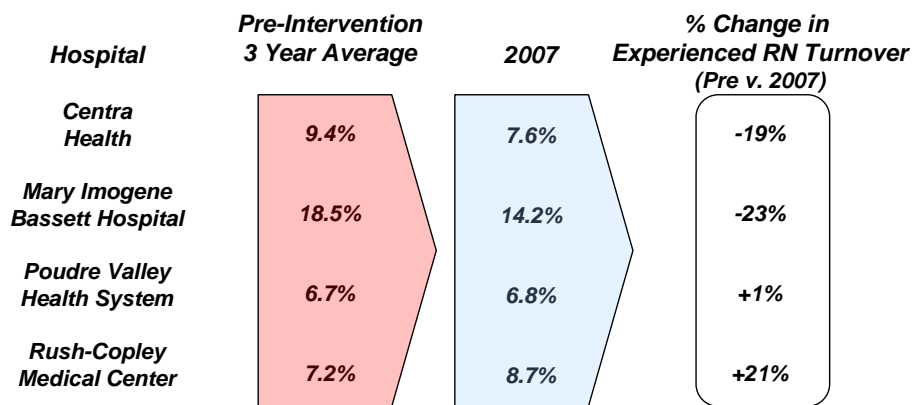
Figure 1
Grantee Ergonomic Initiatives: Changes in Experienced RN Turnover Rates



Greenville’s major program success factors included: 1) Consistent senior leadership support and a dedicated program champion; 2) Beginning with a small-scale pilot program to better control for implementation challenges; and 3) Maximizing success potential by targeting a health system hospital with an older RN workforce (average age of 54) that houses a bariatric unit.

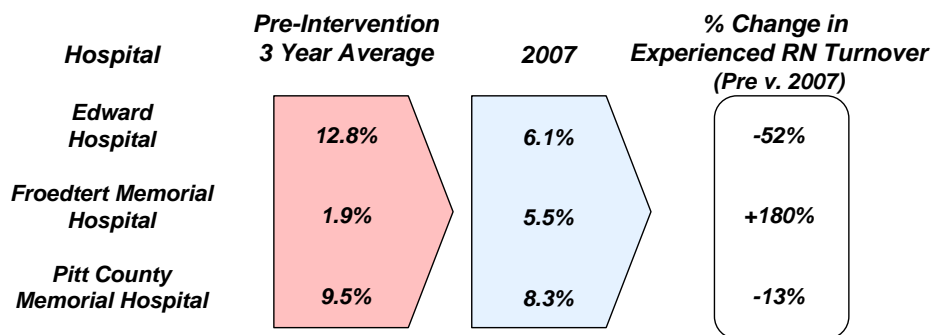
Staffing initiatives (n=4): On average, experienced RN turnover dropped from 8.2% to 7.7% among grantees implementing staffing initiatives (Figure 2). Interventions tested included hospital-wide closed staffing and base staffing models, and the creation of unique positions intended to relieve stress on experienced bed side nurses.

Figure 2
Staffing Initiatives: Changes in Experienced RN Turnover Rates



“Other” retention initiatives (n=3): Including wellness, leadership development and clinical technology programs, experienced RN turnover at hospitals conducting these initiatives fell from about 8.1% to 6.6% (Figure 3). Notably, since its implementation in 2003, over 97% of experienced nurses participating in Pitt County Memorial Hospital’s leadership development program “Fanning the Flame” remain at the hospital.

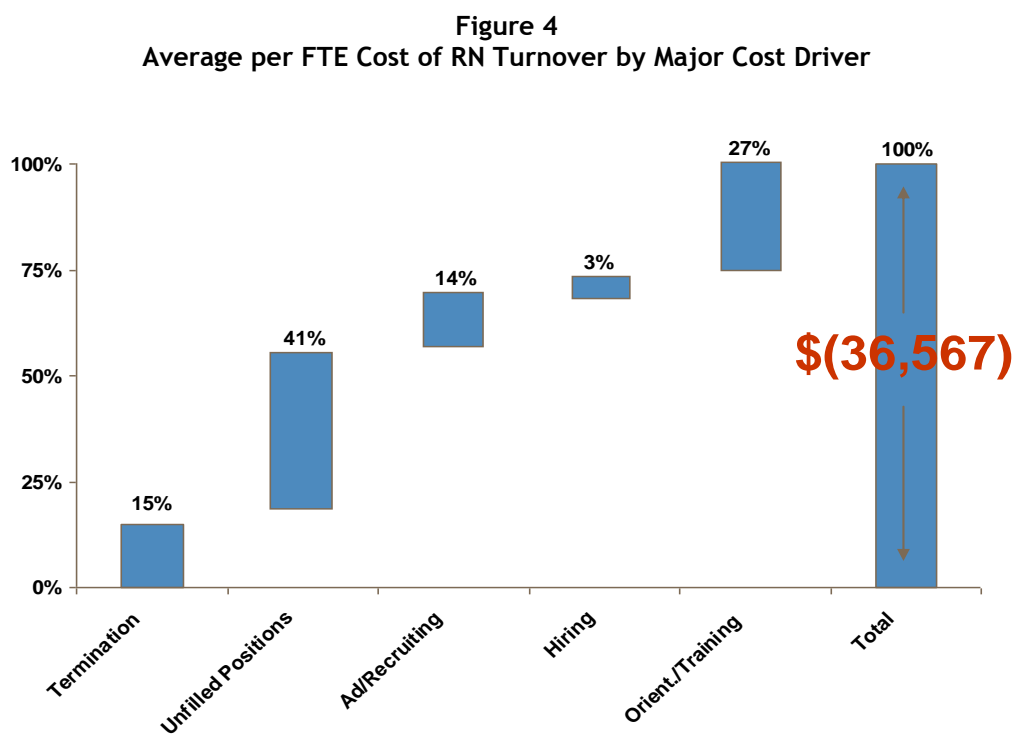
Figure 3
Other Initiatives: Changes in Experienced RN Turnover Rates



Estimating the Direct Costs of RN Turnover

Retaining experienced nurses has important implications for the nation's hospitals beyond the considerable impacts of lost knowledge and experience on staff effectiveness, patient outcomes and other measures of organizational performance. With estimated national annual turnover rates for RNs ranging between 8.4% and 13.9%, the economic costs of losing and replacing a bedside nurse can be significant and adversely affect hospital's financial health.^{2,3}

Highlighting the importance of controlling RN turnover, using 2007 cost data furnished by the 13 grantees, Lewin estimated that the average replacement cost for a full-time equivalent RN was about \$36,567 (Figure 4). About two-thirds of RN replacement costs stem from temporarily filling vacant RN positions and conducting new RN training and orientation. Other costs included advertising and recruiting and termination expenses such as payments for unused vacation time.



Generally in line with several national studies, grantee RN replacement costs ranged from a low of about \$14,225 to a high of \$60,102. Grantee hospital characteristics (size, staffing models and complexity of service mix) together with external market factors (local labor costs and competition for available RNs) helped drive differences in RN replacement costs.

² PricewaterhouseCoopers' Health Research Institute. *What Works: Healing the Healthcare Staffing Shortage*. July 2007

³ Bernard Hodes Group. *The 2006 Aging Nursing Workforce Survey*. March 2005.

Wisdom at Work Evaluation Lessons Learned

This evaluation tested the ability of selected strategies identified by the *Wisdom at Work* white paper to improve retention of experienced nurses at 13 hospitals and health systems who received grants from RWJF to evaluate their initiative outcomes. After two years of providing program coordination, technical assistance and analyzing performance data, the following "Lessons Learned" emerged regarding the ability of the interventions tested to improve retention of experienced nurses.

- ***There is no single silver bullet to improve experienced RN retention:*** No single program will likely achieve sustainable improvements in experienced RN retention. Success builds on supportive organization-wide factors, such as sustained leadership commitment, a corporate culture valuing nursing, a structured approach to talent management and retention and ongoing performance measurement and evaluation.
- ***Retention is a focused goal, but frequently not the only one sought by grantees:*** Although improving experienced RN retention was a goal of all grantee initiatives, it often was not the sole focus and desired outcome. Many initiatives sought also to address other important organizational issues such as patient handling injuries, inefficient patient flow and leadership development.
- ***Single initiatives are often one piece of a larger puzzle:*** Many grantees have implemented multiple programs/strategies to retain nurses, often making it hard to disentangle and measure the specific impact of these grantee interventions.
- ***Unplanned internal and external events occur with the passage of time that confound the ability to isolate and measure the impact of grantee initiatives:*** Examples include:
 - Significant expansions of inpatient capacity at several grantee hospitals required the hiring of many new nurses. This placed stress on experienced RNs as they tried to balance bed side care with training and monitoring new staff, resulting in rising turnover.
 - Growing expectations and accountability for RNs in quality and patient safety on top of other responsibilities reportedly resulted in experienced RNs self selecting out of the workforce.
 - Changing hospital Human Resource and compensation practices negatively influenced experienced RN retention at several grantee hospitals.
- ***Hospital data systems are often challenged to collect performance measures of interest.*** Challenges were initially encountered collecting selected performance measures from some grantees. These included staff exit interview data and staffing and turnover data by age cohort that had never previously been collected and analyzed. An unexpected outcome of this evaluation was reports by several grantees that this initiative has helped raise awareness of the need to collect this data to a higher priority level at their organizations.

Conclusion

As a complement to this evaluation, the WAW Coordinating Center is conducting eight in-depth case studies of healthcare and non-healthcare organizations that have been publicly recognized for achieving high levels of success in retaining experienced RNs and other mature workers. A common message from these organizations that applies to this evaluation is that success in retaining experienced staff relies less on specific programs and more on organization-wide factors. These include:

- Consistent leadership commitment through effective communication, transparency and support for a culture valuing nursing.
- Consistent organization-wide focus on talent management and development as a retention strategy.
- Focus on metrics to rapidly identify retention issues and target interventions.
- Aligning benefits to support retention objectives. Examples for experienced RNs include:
 - Phased retirement options
 - Flexible work scheduling options
 - Eldercare benefits
 - Transfers from bedside nursing to clinical mentoring roles

These findings suggest that achieving and sustaining success in retaining experienced RNs is dependent on far more than individual programs. Therefore, the Foundation might wish to consider broadening the focus of future research to explore “Best Practices” in system effectiveness among organizations whose goals include becoming a career destination for talented nurses.

C. SUMMARY DESCRIPTION OF GRANTEE INITIATIVES

Listed below is a brief description of each grantee initiative organized by type of work place adaptation, including: 1) Those testing evidence-based ergonomic workplace redesign approaches; 2) Those testing the impact of human resource-related strategies; and 3) Those testing the impact of other approaches including employee wellness, leveraging of technology, and leadership development. Detailed descriptions of program design, outcomes and lessons learned can be found in the full evaluation report.

Ergonomic Initiatives

Impact of Reducing Physical Practice Burdens on Retention of Experienced Nurses at Cedars-Sinai Medical Center in Los Angeles, California

In 2004 Cedars-Sinai Medical Center started a lift team initiative to decrease the number of back injuries, lost work days, costs related to patient handling injuries and improve RN satisfaction and retention. The lift team initiative included two teams operating at all times. Since implementing the lift team initiative, numbers of days of work lost due to patient handling injuries and disability costs have declined. Challenges encountered include uneven use of the lift team by some inpatient units and the physical size of the organization which reportedly increases response time by lift teams.

Impact of a Lift Team on the Recruitment and Retention of Experienced Nurses at Florida Health Science Center in Tampa, Florida

In the face of rapid growth in patient volume and a growing local nursing shortage, retention of nurses with clinical experience became a strategic driver at this magnet-designated hospital. A hospital-wide lift team initiative was implemented early in 2002 to help improve retention by reducing RN injuries related to patient handling and improving job satisfaction. Outcomes to date are mixed. While turnover among less experienced RNs fell along with the number of patient handling injuries, experienced RN turnover trended upward. Contributing factors appear to be driven by both the local market, including growing opportunities beyond hospital bedside nursing, and the hospital's staffing model which included required 12 hour shifts in some units. A positive outcome of the intervention has been a large drop in the number of days lost by experienced RNs due to patient handling injuries.

Addressing Retention of Experienced Nurses While Promoting Safe Patient Handling at Greenville Hospital System in Greenville, South Carolina

A 2004 risk analysis found that experienced RNs at a small system hospital housing a bariatric surgery program had increased rates of physical injuries due to patient handling. In response, a safe patient handling program was implemented. Minimal lift equipment was purchased, staff was provided ergonomics training and a new role of Nurse Ergonomist was created to oversee and "roll out" the program. Results included sharp declines in experienced RN turnover, fewer experienced RN days lost due to patient handling injuries, cost savings and improved job satisfaction. Lessons learned included the need to clearly define and reinforce the role of Nurse Ergonomist for staff, the importance of consistent support by senior management and managing culture change during the transition from project planning to full implementation. In 2007, the program was rolled-out to the system's rehabilitation and long term acute care hospitals.

The “Smooth Moves” Initiative to Retain Experienced Nurses at the Bedside at Saint Joseph’s Hospital in Atlanta, Georgia

St. Joseph’s Hospital believes that an optimal work environment will enhance recruitment and retention of experienced nurses. As a result, St. Joseph’s Hospital implemented the “Smooth Moves” Minimal Lift Program initiative hospital wide in 2005. Through education and promotion about the available lift teams and ergonomic equipment, St. Joseph’s achieved nurse buy in for the program. Within a year of implementation the hospital saw a reduction in patient movement related injuries for experienced nurses from 22 to 4. Experienced RN turnover has remained relatively unchanged, while turnover among other nurses rose sharply, reportedly influenced by an unanticipated 2007 layoff due to financial issues. Despite challenges, St. Joseph’s parent system, Catholic Health East is now reportedly considering replicating the Smooth Moves program nationally at 31 of its affiliated hospitals.

The Minimum Lift Program Initiative to Reduce Lost Staff Time Due to Patient-Related Injuries at Strong Memorial Hospital at The University of Rochester Medical Center

Strong Memorial Hospital’s experienced nurses had concerns about work load and work demand issues. To address these issues, the hospital implemented a Minimum Lift Team Program in 2005. Utilizing best practices in the industry, this program was intended to reduce the daily stress on experienced nurses and alleviate their concerns about the physical aspect of their jobs. Due to an expansive implementation approach and turnover of staff within the program, the initiative did not initially achieve its desired impact. However, the hospital has used the lessons learned to refine and improve the program.

A Comprehensive Evaluation of the “Smooth Moves” Safe Handling Program at Vanderbilt University Medical Center in Nashville, Tennessee

After a successful pilot, in 2006 the medical center implemented “Smooth Moves”, a hospital-wide safe patient handling program designed to improve staff safety and reduce costs associated with work-related injuries and turnover. The initiative coincided with a hospital expansion that required hiring additional RNs. Although post-intervention patient handling injuries fell sharply, an unexpected outcome of the expansion was increased turnover among experienced RNs. Factors reportedly contributing to experienced RN turnover included nurse preceptor “burn out” from orienting large numbers of new RNs and wage compression resulting from salary increases awarded to younger RNs that exceeded those awarded to their more experienced colleagues.

Staffing Initiatives

Implementing a Closed Staffing Model as a Nursing Retention Strategy at Centra Health at Lynchburg General Hospital, Lynchburg, Virginia

Following the recommendations of a Task Force of Nurse Managers, Lynchburg General Hospital implemented a Closed Staffing model. This model seeks to increase nurse job satisfaction and decrease turnover by keeping nurses on their home units. Since program implementation, Lynchburg General has seen a decline in experienced nurse turnover and absenteeism and improved patient outcomes.

Impact of the Admission Nurse Initiative on Recruiting and Retaining Wisdom at Mary Imogene Bassett Hospital in Cooperstown, New York

In 2001 Mary Imogene Bassett launched the "Admissions Nurse" program. The program is an easily replicated approach to improve the operational efficiency of the admissions process and targets the experienced nurse. A thorough patient admissions process is a key to good outcomes and relieves the staff nurse of the added burden of the admission function. Though this program is not the only factor effecting experienced nurse turnover, the hospital has seen a reduction in this metric since implementation.

Impact of the Base Staffing Model on Retention of Experienced Nurses at Poudre Valley Health System in Ft. Collins, Colorado

Following a 2001 discussion with senior management, the recruitment and retention committee at Poudre Valley Health System suggested a staffing model to address nursing concerns with safe patient care and a better work environment. Senior Nursing Leadership implemented the Base Staffing Model to address the nurse dissatisfaction and high nursing costs. This model staffs for peak patient occupancy, rather than average occupancy. The resulting reduction in overtime and turnover repaid the cost of implementation within six months. In addition to positive financial outcomes, the Base Staffing Model helped maintain consistently low turnover rates and improved RN satisfaction levels. However, given the current health system inpatient volume fluctuations and changing financial environment, PVHS is facing the challenge of continuing to justify the return on investment of this staffing model.

Impact of the ACT Nurse Program on Experienced Nurse Retention at Rush-Copley Medical Center in Aurora, Illinois

Rush-Copley is committed to retention and recruitment of clinical professionals and highlights these as part of its 2010 Vision. The hospital's ACT (Admission, Coordination, Transfer) nurse program is an attempt to realize this vision. The program utilizes experienced nurses to manage patient admittance and placement. Designed by nurses, the initiative intends to improve retention through increased job satisfaction of both the ACT nurse and those nurses that are relieved of the stress of admitting and placing patients. Since implementation in 2005 the program has grown to include ACT nurse "winter challenge" to address bottlenecks associated with high volume during fall and winter month. Early staff satisfaction surveys show improvements and the goal is to reduce staff turnover as the program continues to mature and evolve.

Other Retention Initiatives

Impact of the Wellness at Work Lifestyle Change Initiative on Retention of Experienced Nurses at Edward Hospital and Health Services in Naperville, Illinois

In 2003, Edward implemented "Wellness at Work", a series of initiatives targeting lifestyle changes in order to foster an environment of optimal staff health and well-being and help reduce the stress-related and physical challenges of the nursing profession for mature RNs. Over 40% of mature RNs participate in the program and it has contributed to greatly improved retention in recent years. However, a major challenge encountered was the presence of confounding variables, including other retention initiatives that made it difficult to accurately assess the impact of this specific intervention on mature RN retention.

The Virtual Intensive Care Unit as an Alternative Environment for Critical Care Practice and Experienced RN Retention at Froedtert Hospital in Milwaukee, Wisconsin

Froedtert Hospital implemented the Virtual Intensive Care Unit (vICU) in 2005 to improve quality outcomes for ICU patients. Staffed by experienced ICU nurses, the unit provides remote monitoring of ICU patients across multiple sites. Experienced critical care nurses are required to staff this unit but the work is physically less demanding than traditional ICUs. The purpose of this study was to evaluate vICU as an alternative environment to retain older ICU nurses. No vICU turnover has been reported since implementation. Data from focus group interviews and an electronic survey indicate vICU is less stressful, physically less demanding, intellectually stimulating, and nurses have positive working relationships with their nurse and physician vICU colleagues. The vICU may be an example of an alternative work environment that maintains "Wisdom at the Bedside."

Fanning the Flame: A Retention Initiative for Experienced Nurses at University Health System of Eastern Carolina in Greenville, North Carolina

Responding to perceptions among experienced RNs that the hospital offered few educational opportunities tailored to their needs, the Fanning the Flame program was instituted in 2003. Focusing on retention, the program empowers the experienced bedside nurse through a three day educational experience supporting professional development. Results to date include reduced experienced RN turnover, increased job satisfaction and increased sense of collegiality among participants. Over 97% of nurses participating in the program have remained in the organization. A key lesson learned is that keeping experienced nurses at the bedside by helping them expand their practice creates a win-win situation for both the nurse and the hospital.