

Transition Evidence Grid – March 2009

Project	Description	Elements	Measurement	Length	Status/Results
<p>1 Canadian Nurses Association's Guide to Preceptorship and Mentoring</p> <p>Report Online: http://www.cna.aaic.ca/CNA/nursing/education/mentorship/default_e.aspx</p> <p>Entitled, "Achieving Excellence in Professional Practice"</p> <p>International</p>	<p>General guide for setting up a mentoring and preceptorship for novice nurses.</p>	<ul style="list-style-type: none"> ▪ Relevant terms defined ▪ Benefits cited ▪ Costs explored ▪ Steps for developing a successful program identified ▪ Preceptor/mentoring competencies identified 	<p>Reviewed literature</p>	<p>N/A</p>	<p>From literature identified increased satisfaction, increased confidence, increased retention, and improved patient care.</p>
<p>2 Flying Start in Scotland</p> <p>Information available: http://www.flyingstart.scot.nhs.uk/</p> <p>International</p>	<p>Web-based transition program launched in January 2006. Over 1,200 new nurses have taken part in the program. Approximately 200 hours of didactic content, taking about 2-5 hours per week. Uniqueness in being a Web-based program.</p>	<ul style="list-style-type: none"> ▪ Mentors are assigned ▪ Connections with peers/mentors can be accomplished online ▪ Online modules include: <ul style="list-style-type: none"> ▪ Communication ▪ Clinical skills ▪ Teamwork ▪ Safe practice ▪ Research for practice ▪ Equality and diversity ▪ Policy ▪ Reflective practice ▪ Professional development ▪ Career pathways 	<p>Currently they are interviewing with an independent research team to evaluate the program.</p>	<p>1 year</p>	<p>Have agreed to send us the research tender specification so that we can see what they're intending to evaluate; along with that they'll send us their literature review. The full evaluation won't be completed for 24 months.</p>

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<p>3 Ireland</p> <p>Background available online with document entitled: "Report of the Commission of Nursing," 1998.</p> <p>For regulation, this document, also available online, would be helpful: "Requirements and Standards for the Midwife Registration Education Programme," 2000.</p> <p>International</p>	<p>In Ireland they transferred from an apprenticeship 3-year program to a 4-year program in 2002. Their implementation committee recommended a 36-week rostered year in the final year of the program.</p>	<p>Students are paid on the first point of their scale for staff nurses during the transition program. During this period the students are still in their education program. This is accomplished through regulatory mandate.</p>		<p>36 weeks</p>	<p>There is no data available at this point, though we are in touch with them, and they will provide data when they have it.</p>
<p>4 Portugal</p> <p>"Nursing Internate" Report not available yet.</p> <p>International</p>	<p>Through regulation, the country of Portugal is beginning to develop a regulatory transition model.</p>	<p>This program is being designed from a regulatory mandate.</p>			<p>As soon as their report is approved they have promised to send it to us, and they'd like to see a copy of NCSBN's Transition Model.</p>
<p>5 Advisory Board Company</p> <p>Berkow, S., Virkstis, K., Stewart, J. & Conway, L. (2008). Assessing new graduate performance. <i>JONA</i>, 38(11), 468-474.</p> <p>[National Executive Center (2008). Bridging the Preparation-Practice Gap: Volume I: Quantifying New Graduate Nurse Improvement Needs: Washington DC: The Advisory Board Company; National Executive Center (2008). Bridging the Preparation-Practice Gap: Volume II: Best Practices for Accelerating Practice Readiness of Nursing Students. Washington DC: The Advisory Board Company.]</p> <p>National</p>	<p>A typical nursing staff now comprises more than 10% new graduates, and while 90% of academic leaders believe their students are fully prepared to practice, only 10% of the hospital and health system nurse executives believe their new nurses are fully prepared to provide safe and effective care. The findings provide ideas for promising opportunities for improving practice readiness.</p>	<p>They triaged the 36 critical nurse competencies, looking at relative curricular emphasis, versus new graduate proficiency. Of the 36 competencies, the following had the least relative curricular emphasis and the least new graduate nurse proficiency:</p> <ul style="list-style-type: none"> ▪ Follow up ▪ Initiative ▪ Understanding quality improvement ▪ Completion of tasks within expected timeframe ▪ Track multiple responsibilities ▪ Conflict resolution ▪ Delegation 	<p>The Center developed parallel survey tools for academic and frontline nursing leaders using an iterative process, incorporating input from 100 experts. At the heart of both survey tools was a common set of 36 nursing competencies. Center researchers collected results via an online survey tool from 5,700 frontline nurse leaders and more than 400 nursing school deans, directors, and department chairs.</p>	<p>A specific length of a program was not promoted, though best practices for accelerating practice readiness were presented. Best practices (which included detailed components on implementation) were:</p> <ol style="list-style-type: none"> 1. Targeted clinical rotations 2. Expert clinical instruction 3. Exceptional student experiences <p>The 2006 publication from the Nursing Executive Center presented exemplars for transition programs. Of the 9 programs highlighted, 6 had 1-year programs; 1 had a 7-month program; 1 was 22 weeks; 1 was 14.5 weeks.</p>	<ul style="list-style-type: none"> ▪ It is not necessary to customize an entirely different transition strategy for each new graduate. A rather consistent approach (such as a standardized transition program) would be possible. ▪ It is important to prioritize new graduate's most pressing needs (See Elements above). ▪ Recommend partnerships between practice and education. ▪ While many programs have been posthire, collaborative prehire initiatives are important.

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<p>6 2002 American Health Care Association Survey</p> <p>Reported available at: http://www.ahcancal.org/Pages/Default.aspx, under Research and Data.</p> <p>Updated information expected in spring of 2008.</p> <p>National</p>	<p>Survey completed by 6,155 U.S. nursing homes.</p>	<p>N/A</p>	<p>Collected information from 6 nursing staff positions on:</p> <ul style="list-style-type: none"> ▪ The number of vacant positions as of June 30, 2002 ▪ The number of employees who have left these facilities from Jan. 1 through June 30, 2002 ▪ Relative difficulty in recruiting key nursing staff 	<p>N/A</p>	<ul style="list-style-type: none"> ▪ Annual turnover of RNs, LPNs, and DONs is 50% ▪ 2/3 of facilities reported it was harder to recruit RNs and LPNs in 2002, compared to previous year.

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<p>7 AHRQ: Medical Errors: The Scope of the Problem: An Epidemic of Errors Report from Agency for Healthcare Research and Quality, retrieved February 23, 2009, from: http://www.ahrq.gov/qual/errback.htm</p> <p>National</p>	<p>Publication No. AHRQ 00-P037</p>	<p>N/A</p>	<p>Summary of reports on national governmental data.</p>	<p>N/A</p>	<ul style="list-style-type: none"> ▪ Errors occur in settings other than hospitals, including physician's offices, nursing homes, pharmacies, urgent care centers, and care delivered at home. For example, investigations from the MA State Board of Registration in Pharmacy estimate that 2.4 million prescriptions are filled improperly each year in that state. ▪ Medical errors cost the nation approximately \$36 billion annually, with about \$17 billion being related to preventable errors. ▪ From IOM 1999 report "To Err is Human: Building A Safer Health System," 44,000 to 98,000 people die each year from medical errors. ▪ According to a national poll, 42% of respondents have been affected by a medical error, either personally or through a friend or relative; 32% of the respondents indicate the error had a permanent negative effect on the patient's health; respondents rated the health care system as moderately safe (4.9 on a scale of 1-7), with 7 being "very safe." ▪ In another survey, Americans are "very concerned" about being given the wrong medication (61%); being given medications that negatively interact (58%). ▪ A landmark study on medical errors found that 70% were preventable; another study showed that 54% of surgical errors were preventable.

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<p>8 Beecroft, P.C., Dorey, F. & Wenten, M. (2007). Turnover intention in new graduate nurses: a multivariate analysis. <i>Journal of Advanced Nursing</i>, 62(1), 41-52.</p> <p>National</p>	<p>This national study of the Versant Residency program reported on the relationship of new nurse turnover intent with individual characteristics, work environment variables, and organizational factors and to compare new nurse turnover with actual turnover in the 18 months of employment following completion of a residency. As background evidence, a 35-60% turnover rate for new graduates was reported from the literature. They presented data of the influence of turnover decreasing patient safety and health care outcomes. Further, changes in staffing decrease the effectiveness of team-based care on patient units, resulting in less effective working relationships and ultimately affecting patient care.</p>	<p>Versant's program (see details under Versant).</p>	<p>A prospective design was used with data collected from 1999 to 2007 (seven years of data were used). The study respondents (n=889) participated in a standardized residency program.</p> <p>Tools included: Skills Nursing Competencies Rating Scale: Self Report; Slater Nursing Competencies Rating Scale: Self-Report; Corwin's Nursing Role Competency Scale; Ways of Copying Revised; Conditions for Work Effectiveness Questionnaire; Schutzenhofer Professional Nursing Autonomy Scale; Clinical Decision-Making Scale; Work Satisfaction Scale; Nurse Job Satisfaction Scale; Leader Empowerment Behaviours Scale; Group Cohesion Scale; Organizational Questionnaire; Turnover Intent; and actual turnover.</p>	<p>18-22 weeks</p>	<ul style="list-style-type: none"> ▪ There was an increased likelihood of turnover intent for older new graduates who did not get their choice of units. ▪ Stress was reported as an important issue for new graduates (in one study 58% of new graduates were highly stressed). Seeking social support led to turnover intent, and the explanation may be this reflected failure to obtain the necessary support within the system. ▪ Lower scores on skills self-confidence and perceptions of competency contributed to turnover intent. Reported that other studies show preceptor support, reasonable expectations, praise and opportunities for interaction build confidence. ▪ Lower scores for enjoyment in one's job contributed to turnover intent. ▪ When nurses are satisfied with their jobs and pay and feel committed to the organization, the odds of turnover intent decrease. ▪ 24-month employment following this program ranged from 83%-98% (overall 84%).

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<p>9 Behrens, Michael J. September 10, 2000, investigative report, <i>Chicago Tribune</i></p> <p>National</p>	<p>Analyzed 3 million state and federal computer records to create a database that quantifies the role nurses play in medical errors.</p>	<p>N/A</p>	<p>Federal and state computer records reviewed, though author acknowledges that they are incomplete.</p>	<p>N/A</p>	<ul style="list-style-type: none"> ▪ From 1995-2000 at least 1,720 hospital patients have been accidentally killed and 9,584 others injured by nurses across the country. For example: <ul style="list-style-type: none"> ▪ 418 killed, and 1,356 injured, by RNs operating infusion pumps incorrectly. ▪ 216 patients were killed, and 429 injured, by RNs who failed to hear alarms of lifesaving equipment. ▪ 119 patients killed, and 564 injured, by unlicensed, unregulated nurse aides, not adequately supervised by RNs. ▪ Author concludes that these deaths and injuries are due to cuts in staff and other resources. ▪ Illinois state disciplinary records show an increasing focus of investigations on temporary (agency, traveling) nurses, and most were linked to lack of knowledge or unfamiliarity with patients.

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<p>10 Carnegie study</p> <p>Some information about the study on their Web site: http://www.carnegiefoundation.org/</p> <p>A partial report was published here:</p> <p>Benner, P., Sutphen, M. & Leonard-Kahn, V. (2008). Formation and everyday comportment. <i>American Journal of Critical Care</i>, 17(5), 473-476.</p> <p>National</p>	<p>Part of larger, national study. Research design was qualitative ethnography, utilizing interviews (total of 588 individual interviews), focus groups, review of curricula, and observations in the classroom and clinical facilities, in excellent nursing programs. Furthermore 3 national surveys were conducted with members of the American Association of Colleges of Nursing, the National League of Nursing, and the National Student Nurse Association.</p>	<p>Recommendation 9.b. states: We recommend residency training programs lasting at least one year focused on one area of nursing care to be offered in all health care delivery institutions.</p> <ul style="list-style-type: none"> ▪ Residency should focus on at least one area of specialty so the nurse has the opportunity to develop in-depth clinical patient population knowledge in that area. ▪ Improved follow-through evaluation of nursing graduates that identify practice-educational gaps. ▪ Evaluation of the residency program should include patient outcomes. ▪ To offset the costs of these programs, they recommend lower entry-level salaries for the residency year (similar to physical therapy residencies). 	<ol style="list-style-type: none"> 1. Ethnographic qualitative study 2. Survey of the AACN members 3. Survey of NSNA members 	<p>1 year</p>	<p>Conclusions related to this initiative:</p> <ul style="list-style-type: none"> ▪ 3 apprenticeships were studied, including cognitive, clinical judgment and know-how, and ethical comportment. It was found that these apprenticeships must be integrated. ▪ Students and faculty alike pointed to need for yearlong residency programs. ▪ Nearly no planned interdisciplinary experiences took place in prelicensure programs. ▪ Few students reported confidence in detecting subtle clinical changes in their patient's condition and little follow-through was possible in prelicensure programs. ▪ Recommend students continue to care for 1-2 patients in their prelicensure program; researchers think larger patient care assignments will create a gap in the student's understanding of the nurse patient relationship due to insufficient time for learning and reflection.

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<p>11</p> <p>"Evidence-Based Nursing Education for Regulation (EBNER)," 2006, and related Systematic Review of Studies on Nursing Education Outcomes: An Evolving Review," 2006, are available here: https://www.ncsbn.org/208.htm</p> <p>Related research, NCSBN Research Brief Vol. 24, "A National Survey on Elements of Nursing Education" is available here: https://www.ncsbn.org/360.htm</p> <p>National</p>	<p>Report of the 2006 Practice, Regulation and Education (PR&E) Committee, after being charged by the Board of Directors to identify evidence for the rules and regulations at boards of nursing. It was developed following a rigorous systematic review of related nursing education research outcomes and NCSBN research on nursing education.</p>	<p>Identified these education broad areas that are supported by the evidence:</p> <ul style="list-style-type: none"> ▪ Adjunctive teaching methods; ▪ Assimilation to the role of nursing; ▪ Deliberate practice with actual practice; ▪ Faculty-student relationships; and ▪ Teaching methodologies (specified in the report). 	<p>Methodology available in the final report.</p> <p>Utilized the following levels of evidence:</p> <p>I. RCT, meta-analyses, systematic or integrative review – strongest level of evidence.</p> <p>II. Quasi-experimental, correlational, descriptive, survey, evaluation and qualitative designs – next strongest level.</p> <p>III. Expert opinion and consensus statements – weakest level, but adds value to professional research, especially when there isn't available evidence.</p>	<p>N/A</p>	<p>Systematic review identified:</p> <ul style="list-style-type: none"> ▪ Assimilation to the role of nursing was identified as a major element, and this includes transition to practice programs. ▪ The systematic review identified feedback and reflection as integral threads in pre-and postlicensure learning.

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<p>12 Fink, R., Krugman, M., Casey, K. & Goode, C. (2008). The graduate nurse experience: Qualitative residency program outcomes. <i>JONA</i>, 38(7/8), 341-348.</p> <p>National</p>	<p>These are qualitative results from the UHC/AACN residency program; data have been generated since 2002, using 37 academic sites with more than 5,000 graduate nurses. The purposes of this study were to analyze the qualitative data from larger study and to determine if the themes they identified could be used convert open-ended questions to quantitative questions. A convenience sample of 1,058 graduates hired between May 2002 and September 2003 and who had fully completed the program were used. Of those respondents, 434 completed the surveys for all three periods. Excellent examples of student "stories" and comments were provided.</p>	<p>See the University HealthSystem Consortium/ American Association of Colleges of Nursing report for specifics of the residency.</p>	<p>Casey-Fink Graduate Nurse Experience Survey</p>	<p>Residency program is one year long.</p>	<ul style="list-style-type: none"> ▪ Reported difficulty with skills, particularly as they moved into a more independent role and more complex situations. ▪ 24% were stressed at baseline; 11% were stressed at 6 months; 18% were stressed at 12 months. ▪ 8% reported no role difficulties at baseline; 28% had none at 6 months, and 58% had none at 1 year. ▪ Transition difficulties included role changes, lack of confidence, workload, fears, and orientation issues. ▪ When asked what could be done to help residents feel more supported, 24% at baseline, 34% at 6 months and 43% at 12 months reported they already felt supported. Some areas where they expressed needing more support included feedback, mentorship, manager support, preceptor support, skills practice, time management, patient case discussion, gradually increased ratios, and introductions to physicians and staff. ▪ The UHC/AACN residency quantitative and qualitative data support that outcome measures dip at 6 months, making this a "critical" period for graduate nurses. ▪ Graduate residents expressed high satisfaction with their chosen career. ▪ Frustration with work environment, including unrealistic ratios, tough schedule, futility of care, and lack of support from ancillary personnel. ▪ Consistent with other studies, new nurses are developmentally unable to exercise intuition about subtle changes in patients.

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<p>13 Hofler, L. D. 2008. Nursing education and transition to the work environment: A synthesis of national reports. <i>Journal of Nursing Education</i>, 47(1), 5-12.</p> <p>National</p>	<p>2-part process to identify reports and to analyze their content. First organizations were identified (using experts), and then each site was used to retrieve and analyze their work. They purposely did not include regulatory agencies and NCSBN because "their mission is to protect the public." They identified 15 organizations and 35 reports.</p>	<p>Reports identified were between 1995-2005. For inclusion, each report:</p> <ul style="list-style-type: none"> ▪ Was published by a nursing professional organization. ▪ Included recommendations about nursing education and the transition of nurses to the work environment. ▪ Did not focus primarily on regulatory issues. 	<p>The data were reviewed for themes, which were then cross-compared from each report to develop an understanding of the recommendations. Five thematic categories were identified.</p>	<p>N/A</p>	<p>Themes identified were:</p> <ul style="list-style-type: none"> ▪ Standards, credentialing, regulation and accreditation, including recommendations on regulation, accreditation, standardization via licensure, and standardization of professional credentialing. This theme was most closely related to our work, and synthesis of the recommendations included differentiation of practice through accreditation and licensure; articulation of competence for differentiated roles; development of political activism; and funding at the national, state and local levels. <p>Other themes included:</p> <ul style="list-style-type: none"> ▪ Capacity and infrastructure of the educational system. ▪ Collaboration and integration with others, including those outside of nursing. ▪ Incentives in the health care delivery system for the development of a highly educated workforce. ▪ Transition to work environment includes recommendations that describe the transition of new nurses from an academic to a practice setting. That is, they are recommending more collaboration between education and practice.

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<p>14 Joint Commission White Paper (2002), entitled: "Health Care at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis"</p> <p>Report available: http://www.jointcommission.org/Nurses/</p> <p>National</p>	<p>23 esteemed healthcare professionals, from nursing and other disciplines, representing education, practice and regulation, developed a white paper that calls for a "standardized, post-graduate nursing residency program," similar to that from ACGME, with funding to support the training.</p>	<p>Suggested areas of emphasis include:</p> <ul style="list-style-type: none"> ▪ Team training ▪ Support of nursing orientation ▪ Support of in-service and continuing education ▪ Creation of career ladders ▪ Seek federal support for the transition programs 			<p>Reported on the high cost of nurse turnover; assuming a turnover rate of 20 percent, with a hospital employing 600 nurses, it will cost about \$5,520,000 to replace them (research shows it costs \$46,000 to replace a medical/surgical nurse and \$64,000 to replace a critical care nurse).</p> <p>Cites evidence from the Illinois state disciplinary records that cite temporary nurses having increasingly more medical error investigations (relates patient safety to retention rates).</p> <p>Provides data to support new nurses receiving little orientation/transition.</p> <p>Flexner Report of 1910 made medical residencies obligatory, no such requirement exists for nursing.</p> <p>Medical residencies are partly paid for by medicare monies and are standardized through ACGME.</p>

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<p>15 Krugman, M., Bretschneider, J., Horn, P.B., Krsek, C.A., Moutafis, R.A. & Smith, M.O. (2006). The national post-baccalaureate graduate nurse residency program. <i>Journal for Nurses in Staff Development</i>, 22(4), 196-205.</p> <p>National</p>	<p>This was a description of the UHC/AACN residency program with background literature that supports transition to practice. Increased stress in the new graduate, the education-practice gap, and first-year turnover were discussed; they reported literature that estimates the cost of replacement of a nurse as high as \$81,000; indirect costs include preceptor exhaustion, decreased morale, time managers spend interviewing.</p>	<p>See the University HealthSystem Consortium/ American Association of Colleges of Nursing report for specifics of the residency. Each site commits to a 0.5 to 1.0 FTE funded coordinator position.</p>	<p>McCloskey Mueller Satisfaction Scale; Gerber Control Over Practice Scale; Casey-Fink Graduate Nurse Experience Survey; UHC Demographic Database; Investigator Developed Residency Evaluation Form</p>	<p>1-year; phase one 1:1 baccalaureate prepared preceptor; phase two for second 6 months the resident continues with monthly seminars with a resident facilitator. In phase two the residents are encouraged to find a mentor and construct a career plan.</p>	<ul style="list-style-type: none"> ▪ These were preliminary results (first 6 sites); more up-to-date results were provided in the UHC/AACN section. However, this report found: ▪ The importance of the cohort group role, with the importance of the monthly support sessions. ▪ Turnover rate for this early report of the residency program was 8%. ▪ Report goal for establishing a national model with goal of obtaining federal reimbursement. ▪ Transition to practice is not completed for 9-12 months, particularly because of stress, self-perceived competency, setting priorities, and these are related to safety. ▪ Cost of residency is less than costs to recruit new nurses.

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<p>16 Lynn, M. R. (2007). "Initial Evaluation HRSA-Funded Residency and Internship Programs."</p> <p>Funded by HRSA Contract: HH-SH2302 00632050C</p> <p>This preliminary report is available from HRSA or NCSBN.</p> <p>National</p>	<p>Evaluative study of the aggregate of transition programs they fund, though participation is voluntary. 12 of the HRSA-funded sites agreed to take part. Questions: Are there differences between</p> <ul style="list-style-type: none"> ▪ Hospital vs. home health ▪ Length (less than 6 mos. vs. more than 6 mos.) ▪ Classification of residents (new graduates vs. reentry) ▪ Degree ▪ Magnet status ▪ Unit of employment ▪ HRSA vs. UHC/AACN 	<p>N/A This wasn't one planned residency, but instead it consisted of many different types.</p>	<ul style="list-style-type: none"> ▪ Gerber's Control Over Nursing Practice Scale ▪ McCloskey/Mueller Satisfaction Scale ▪ Casey-Fink Graduate Nurse Experience Survey ▪ These tools were also used in the UHC/AACN study 	<p>10 weeks - 3 years</p>	<p>Many of the groups did not have large numbers. They found significant differences between:</p> <ul style="list-style-type: none"> ▪ Program start and finish, which supports these programs. ▪ No differences between hospital and home health residents; this provides some support for including all settings. ▪ No differences between less than 6-month-long programs and over 6-months (except shorter programs felt they were better paid), though numbers were small. ▪ There were differences between new graduates and nurses who change specialties. ▪ No differences between educational groups. ▪ Residents in magnet hospitals were more satisfied. ▪ There were differences across specialties. ▪ There were differences between the HRSA and UHC/AACN residents.
<p>17 NCSBN's Analysis of Nursys® Disciplinary Data from 1996 – 2006 (December 2007)</p> <p>Unpublished report available from NCSBN</p> <p>National</p>	<p>Report of 59,695 nurses reported by 44 boards of nursing for disciplinary action between January, 1996, and the end of December, 2006.</p>	<p>N/A</p>	<p>Nursys® electronic information system</p>	<p>10 years of disciplinary data</p>	<p>Trend of increasing discipline over the 10 year period.</p>

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<p>18 NCSBN Employer Survey (2004)</p> <p>Research Brief is available: https://www.ncsbn.org/360.htm</p> <p>Vol. 14, "Report of Findings from the 2003 Employers Survey"</p> <p>National</p>	<p>Surveys completed by 1,230 employers from all settings.</p>	N/A	<p>Survey was investigator constructed.</p>	N/A	<p>Employers answered "Yes definitely" to overall preparation to provide safe, effective care:</p> <ul style="list-style-type: none"> ▪ ADN – 41.9% (n=321) ▪ BSN – 41.9% (n=239) ▪ Diploma – 48.8% (n=106) ▪ LPN – 32.9% (n=237)
<p>19 NCSBN Interim Results of Post-Entry Study: Preliminary report available from NCSBN.</p> <p>Full report is due in September 2008.</p> <p>National</p>	<p>Longitudinal, qualitative study of new nurses with 1,111 e-mail responses to date. LPN responses not coded yet.</p>	N/A	<p>Email responses with qualitative analysis about how competence develops</p>	N/A	<p>Implications for transition to practice:</p> <ul style="list-style-type: none"> ▪ The diversity of practice settings and extreme acuity of hospital settings suggest a site-specific transition program with a preceptor for the first year. ▪ The narratives demonstrated a real need for novice nurses to revisit action and decisions and reflect on alternate pathways (i.e., need to debrief and reflect). ▪ Need for role clarification relative to LPNs and PCAs. Supervision of LPNs or PCAs was either minimal or totally absent.
<p>20 NCSBN's Transition Study (2006)</p> <p>Research Brief available at: https://www.ncsbn.org/360.htm</p> <p>Vol. 22 – "Report of Findings from the Practice and Professional Issues Survey; Transition to Practice: Newly Licensed RN and LPN/VN Activities." April 2006</p> <p>National</p>	<p>NCSBN conducted a survey on 628 new nurses and 519 new LPNs related to transition to practice issues. Survey was investigator constructed.</p>	N/A	<p>Survey was investigator constructed.</p>	N/A	<ul style="list-style-type: none"> ▪ LPNs assigned to care for patients earlier and caseload heavier ▪ 38.9% of RNs participated in "ships" + orientation ▪ 16.2% of LPNs participated in "ships" + orientation ▪ Graduates of ADN programs were more likely than BSN graduates not to have a "ship" ▪ Across nation, transition programs were quite variable ▪ Research Brief is available online

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<p>21 NCSBN data presented at a national forum, entitled "Transition of New Nurses to Practice: A Regulatory Perspective," in Chicago, February 22, 2007.</p> <p>National – PNs</p>	<p>400 new LPNs/VNs; 231 preceptors; non-experimental, comparative, nurse-preceptor dyad design.</p> <p>Aims:</p> <ul style="list-style-type: none"> ▪ To describe the transition experience of newly licensed LPNs/VNs ▪ To identify factors that influence transition to practice of LPNs/VNs ▪ To examine the impact of the transition experience on clinical competence and safe practice issues of newly licensed LPNs/VNs 	N/A	<p>Design: non-experimental, comparative, nurse-preceptor dyad.</p> <ul style="list-style-type: none"> ▪ Clinical competence defined by 35 questions on core set of functions, with validation by preceptors. ▪ Cronbach's alpha=.93 ▪ Content validity and construct validity established. ▪ Tool for practice errors contained 21 items. 	N/A	<ul style="list-style-type: none"> ▪ Transition experiences vary, with those in hospitals more likely to have internship experiences and longer programs. ▪ More likely to make practice errors when they reported they were less competent and/or more stressed. ▪ Average length of a transition program was 4.7 weeks. Because effect size (mean length of transition programs) was so small, there was not much evidence to be gleaned from those in transition programs vs. those without programs.

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<p>22 NCSBN data presented at a national forum, entitled "Transition of New Nurses to Practice: A Regulatory Perspective," in Chicago, February 22, 2007.</p> <p>National- RNs</p>	<ul style="list-style-type: none"> ▪ N=560 new nurses; N=231 preceptors ▪ Non-experimental, comparative, nurse-preceptor dyad design. ▪ To describe the transition experience of newly licensed nurses ▪ To identify factors that influence transition to practice ▪ To examine the impact of the transition experience on clinical competence and safe practice issues of newly licensed RNs 	N/A	<ul style="list-style-type: none"> ▪ NCSBN's Clinical Competency Assessment Scale – 35 items assessing 4 dimensions of clinical competence ▪ NCSBN's Practice Errors Survey – 21 items measuring practice errors. ▪ Survey was investigator constructed and validation and reliability established 	N/A	<ul style="list-style-type: none"> ▪ Preceptors and new graduate ratings were similar with competence ratings (no significant differences); conversely, new RNs reported significantly more practice errors than their paired preceptor did. ▪ Areas new nurses acknowledge weaknesses: utilize research; recognize when demands exceed capability; delegating and supervising. ▪ Vulnerable period (less competent; more stress) was 3-6 months when new graduates were less supervised ▪ During first 3 months, those with a primary preceptor rated themselves as performing at significantly higher levels than those without the primary preceptor. ▪ When more competent in clinical reasoning ability – significantly fewer errors ▪ When more competent in communication and interpersonal relationships – significantly fewer errors ▪ When transition programs (in hospital setting) addressed specialty, significantly fewer errors. ▪ Stress was positively related to practice errors. ▪ Highest stress levels occurred in 3-6 months of practice. ▪ 19% who had an internship program reported they were likely to leave their position within 6 months; 33% without an internship program reported they were likely to leave their position within 6 months.

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<p>23 National Survey of Nursing Home Workforce Satisfaction (2006)</p> <p>Report available online: http://www.myinnerview.com/downloadPDF.php?pdf=miv/reports/MIV_NHW_S07_FA.pdf</p> <p>National</p>	<p>Collected satisfaction data from 106,858 staff working in 1,933 nursing homes in every state, except Alaska.</p>	<p>N/A</p>	<p>Utilized confidential surveys completed by employees and returned to MyInnerView during 2006. Psychometrics of the instrument were good. To delve more deeply into employee concerns, they identified priority items. Then they calculated a priority rating on how each item ranked, both in terms of its average score and the strength of its correlation with workplace recommendation. These top ratings (see results column) reflect areas where most nursing homes need improvement and where the greatest impact in satisfaction is likely.</p>	<p>N/A</p>	<ul style="list-style-type: none"> ▪ Generally found good satisfaction of nursing home employees. ▪ The priority listings were very relevant for our transition work: 1) help with job stress; 2) management listens; 3) management cares; 4) training to deal with difficult residents; and 5) training to deal with difficult family members.

Project	Description	Elements	Measurement	Length	Status/Results
<p>24 Smith, J. & Crawford, L. (2003). Medication errors and difficulty in first patient assignments of newly licensed nurses. <i>JONA's Healthcare Law, Ethics, and Regulation</i>, 5(3), 65-67.</p> <p>National</p>	<p>This was an NCSBN national study new graduate RNs and LPNs with a focus on medical errors. The surveys were sent to stratified random samples of 1000 RNs (65.5% return rate) and 1000 LPNs/VNs (62.3% return rate).</p>	<p>N/A</p>	<p>Investigator designed tool with new nurse self reports.</p>	<p>N/A</p>	<ul style="list-style-type: none"> ▪ 40% of the new LPN/VN graduates were employed in long-term care facilities, with 38% in hospitals and 17% in community or ambulatory care settings. ▪ 87% of the new RN graduates were employed in hospitals, with 6% in long-term care facilities and 4% in community or ambulatory care settings. ▪ 63% of the new RN graduates were employed in urban/ metropolitan areas, while 47% of the new LPN/VN graduates were employed in urban/ metropolitan areas. ▪ 49% of the new RN graduates and 41% of the new LPN/VN graduates made errors or were involved in errors. ▪ Of the errors, 75% of the new RN graduates and 71% of the new LPNs/VN graduates were involved with medication errors. Forty percent of the new RN graduates and 47% of the new LPN/VN graduates were involved with errors related to patient falls. ▪ Some of the reasons for errors included inadequate staffing (74% of the new LPN/VN graduates and 70% of the new RN graduates), communication (44% of new RN graduates and new LPN graduates), and inadequate orientation (27% of the new LPN/VN graduates and 18% of the new RN graduates). ▪ In hospitals new RN graduates cared for an average of 3 patients in their first assignment, and that occurred on an average of 8 days after being hired. New LPN graduates cared for an average of 4 patients and that occurred on an average of 6 days after being hired. ▪ In nursing homes new RN graduates averaged 25 patients at the start, whereas LPNs/ VNs cared for an average of 26 patients on their first assignment.

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<p>25 University HealthSystem Consortium/American Association of Colleges of Nursing (UHC/ AACN):</p> <p>Williams, C.A., Goode, C.J., Krsek, C., Bednash, G.D. and Lynn, M. R. (2007). Postbaccalaureate nurse residency 1-year outcomes. <i>JONA</i>. 37(7/8), 357-365.</p> <p>National</p>	<p>This is another national, standardized model that is being implemented in 34 sites in university healthcare settings in 24 states.</p>	<ul style="list-style-type: none"> ▪ Core curriculum with focus on leadership, research based practice, professional development, communication, critical thinking, patient safety, and skills. ▪ Clinical guidance with a preceptor. ▪ Access to a resident facilitator for role development and guidance. ▪ Residents also participate in usual orientation procedures for that institution. ▪ Program designed for BSN graduates, though many agencies have developed alternative programs for ADN and diploma graduates. 	<p>They collect data on skill development and support, perceptions of control over practice, job satisfaction, retention, and demographics. Tools include:</p> <ul style="list-style-type: none"> ▪ Casey-Fink Graduate Nurse Experience Survey ▪ Gerber's Control Over Nursing Practice Scale ▪ McCloskey Mueller Satisfaction Scale 	<p>12 months</p>	<p>Ongoing</p> <ul style="list-style-type: none"> ▪ Turnover of 12%, compared to literature reports from 36%-55%. ▪ Weren't able to gather reliable cost data ▪ Similar to our transition study, showed vulnerability at 4-6 months (dip in scores, with recovery after 6 months). ▪ Dynamics of what occurs during a residency program are complex. ▪ Significant increments were seen on the Casey-Fink scales for Organize and Prioritize and Communication-Leadership. One of the two cohorts showed significant increases in the Support Scale.
<p>26 Versant: Beecroft, P.C., Kunzman, L. and Krozek, C. (2001). RN internship: Outcomes of a one-year pilot program. <i>JONA</i>. 31(12), 575-582.</p> <p>www.versant.org</p> <p>National</p>	<p>Implemented in over 30 organizations nationwide, and they have over 5 years of data (over 3,000 residents). Unique in that it supports a cultural change by incorporating committees within the agency to oversee and plan activities; by including preceptors, mentors, and trained facilitators; being based on a business model; and being a national, standardized model.</p>	<p>Developed using Ohio State University's DACUM method; includes some specialty curriculum.</p> <ul style="list-style-type: none"> ▪ Protected time. ▪ Looping where residents go to other units. ▪ Use a portal Web where competencies are validated. ▪ One-to-one preceptors. ▪ Mentor who is non-evaluative. ▪ Support groups with trained facilitators for a safe, confidential environment. ▪ Classroom and skills lab education. 	<p>Some of the tools used include:</p> <ul style="list-style-type: none"> ▪ Professional Subscale from Corwin's Nursing Role Conception Scale ▪ Schutzenhofer Professional Nursing Autonomy Scale ▪ Skills Competency Self-Confidence Survey (investigator designed) ▪ The Slater Nursing Competencies Rating Scale ▪ The Organizational Commitment Questionnaire (OCQ) ▪ The Anticipated Turnover Scale (ATS) 	<p>18-22 weeks (while the program lasts only 18-22 weeks, from personalcommunication we found that the preceptorship and/or mentoring often continue)</p>	<ul style="list-style-type: none"> ▪ Cost benefit positive ▪ ROI (%) of 67.3 ▪ Increases retention (6% turnover) ▪ Increase competency <p>While the 2001 publication is fairly true to the program, there have been changes (such as from 6 months to 18-22 weeks). Other publications are in process, from personal communication.</p>

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<p>27 California Institute for Nursing and Health Care</p> <p>Information available here: http://www.cinhc.org/</p> <p>Statewide</p>	<p>A collaborative project in California where they are working to redesign nursing education. Their work groups include:</p> <ul style="list-style-type: none"> ▪ Academic/Service Partnerships; ▪ Professional and Clinical Role Development; ▪ Economical Models for Funding Education; ▪ Collaborative Education; ▪ Faculty Recruitment and Development; ▪ Simulation; ▪ New Graduate Transition: Residencies; ▪ Out of the Box – Big Bold Steps for Innovation and Evaluation; and ▪ Synthesis Advisory Team. 	<p>Regarding the transition programs only:</p> <ul style="list-style-type: none"> ▪ Using medical terminology of “attending” nurse who will be with new nurses for 3 years. ▪ Developing collaborative partnerships. ▪ Goal is to go across all settings. ▪ Using the Oregon Model for inspiration, would like a seamless movement from ADN to BSN degrees in nurses. ▪ Are exploring long-term funding. ▪ Study demonstration models. ▪ Compile standards for new graduates based on evidence. 	N/A	Recommend 1 year of transition, and 3 years to move to proficiency	<p>Are in the process of writing a white paper and making recommendations formal. Further, there is a partnership of service in California looking into residency programs. It is being led by nurse leaders from the Association of California Nurse Leaders, with participation from nurse leaders at Tenet Healthcare and Scripps. There is interest in the dedicated nursing education unit that’s being used at the University of Portland, Oregon.</p>
<p>28 Kentucky’s legislation</p> <p>Information available here: http://www.kbn.ky.gov/education/pon/entry/</p> <p>Statewide</p>	<p>Legislation for 120 hours of precepted experience within nursing program (directly before graduation) and 120 hours after graduation with the employer, but before fully licensed.</p>	<ul style="list-style-type: none"> ▪ Education and practice are both responsible. ▪ Monitored through regulation. ▪ Must pass NCLEX within 6 months. ▪ Integrated practicum in education and clinical internship following graduation. ▪ Across settings and education levels. 	NCSBN and a Kentucky University measured outcomes.	120 hours of precepted experiences before and after graduation.	Outcomes being measured, and NCSBN will review the results.

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<p>29 Massachusetts Department of Public Health Board of Registration in Nursing: "A Study to Identify Evidence-Based Strategies for the Prevention of Nursing Errors" – Preliminary Data Report available from NCSBN.</p> <p>Statewide</p>	<p>Descriptive study of nursing errors found in 78 complaint cases involving 34 RNs and 44 LPNs who practiced in nursing homes in Massachusetts; sampling technique was presented.</p>	<p>N/A</p>	<p>Used a case analysis format, with data being collected using a modified Taxonomy of Error, Root Cause Analysis and Practice Responsibility (TERCAP™) audit instrument.</p>		<ul style="list-style-type: none"> ▪ Seven of the 44 LPNs were licensed for 12 months or less; there were no novice RNs in the analysis. ▪ Applicable to the Transition to Practice initiative, errors were linked to inexperience to particular clinical events; lack of familiarity with the practice setting; lack of consistently assigned preceptors and the adequacy of the novice nurse's transition program. ▪ Interruptions challenged the novice LPNs who made errors, thus effecting their organizational, prioritizing, communication, delegation, and task completion skills. ▪ Study calls attention to the potential patient safety benefit of a novice nurse transition program that provides sufficient time, supervision, and support to new nurses.
<p>30 Mississippi Office of Nursing Workforce Nurse Residency Program Information available: www.monw.org</p> <p>Statewide</p>	<p>6-month residency/ internship program, which is implemented through the Mississippi Office of Nursing Workforce.</p>	<ul style="list-style-type: none"> ▪ Coordinator ▪ Weekly meetings/ seminars ▪ 2 weeks of a general orientation ▪ Includes NCLEX reviews ▪ Unit orientation (or specialty content) included ▪ Work up to a full patient load ▪ Preceptors will mentor 1-2 residents/interns 	<p>Factor Analysis of Tool (Halfer-Graf Job/Work Environment Nursing Satisfaction Survey):</p> <ul style="list-style-type: none"> ▪ Resourcefulness – 4 items ▪ Mutual respect – 3 items ▪ Empowerment – 4 items ▪ Nonjudgmental work environment – 2 items ▪ Becoming part of a team – 3 items ▪ Lifelong learner – 3 items ▪ Degree of job fit – 2 items 	<p>3-6 months</p>	<ul style="list-style-type: none"> ▪ Savings of over \$4 million through elimination of agency/travel nurses ▪ Savings of \$1.1 million through decreased turnover ▪ Reduction of vacancy by 47% ▪ Reduction of turnover by 10% ▪ Patient satisfaction increased 10% ▪ 80% of residents completed program

Project	Description	Elements	Measurement	Length	Status/Results
<p>31 North Carolina's Transition program</p> <p>Information is available here: http://www.ffne.org/transition.cfm</p> <p>Statewide</p>	<p>Long-range goal is to create a regulatory model for transitioning new nurses in NC by 2015. Our Research Department is using our transition tools, so these results should enrich our 2006 study results.</p>	<p>Phase I – studying the current transition practices and their impact on newly licensed nurses. Phase II – will focus on developing evidence-based, population-specific transition programs for NC.</p>	<p>Phase I</p> <ul style="list-style-type: none"> ▪ NCSBN's Clinical Competency Assessment Scale – 35 items assessing 4 dimensions of clinical competence. ▪ NCSBN's Practice Errors Survey – 21 items measuring practice errors. ▪ NCSBN's Risk for Practice Breakdown tool – Error index will be generated based on above tool. 	N/A	Data collection taking place now, and study will be completed by summer of 2008.
<p>32 Vermont Nurse Internship Program (VNIP)</p> <p>Information available: http://www.vnip.org/</p> <p>Statewide</p>	<p>A standardized, statewide internship program that incorporates all levels of education (from LPN through BSN) and takes place in all settings. The model has been used in over 20 agencies across the state, in both acute and long-term care. To date over 500 interns have been enrolled in the program. Unique aspects of this program include that it has been used across all settings; that they have a standard program whereby they train their preceptors; and this is a collaborative project between regulation, practice and education.</p>	<ul style="list-style-type: none"> ▪ Educate their preceptors and have started a statewide cred (approximately 200 hours of educator time for each internship cohort and/or session). ▪ Program components include: managed care, standards of care, cultural competence, quality improvement, IVs, medications, pain management. 	<p>COPA model for competencies Retention rates Recruitment Satisfaction</p>	<p>Minimum 10 weeks; specialty care internships sometimes require up to 12 months</p>	<ul style="list-style-type: none"> ▪ Pre-internship retention was 75%, after program is 93%. ▪ 48% of interns were recruited from out of state. ▪ Increased satisfaction. ▪ Informal survey of longterm settings showed positive response to the transition program.

Project	Description	Elements	Measurement	Length	Status/Results
<p>33 Wisconsin Nurse Residency Program (WNRP)</p> <p>Information available here: http://wnrp.org/</p> <p>Statewide</p>	<p>Statewide with 40 plus hospitals, including a large rural group, which is a unique aspect of this program. They have enrolled over 300 new graduates in this program.</p>	<ul style="list-style-type: none"> ▪ Clinical coach ▪ Learn to think like a professional ▪ Meet once a month ▪ Reflection and feedback ▪ Focus on: <ul style="list-style-type: none"> ▪ Critical thinking ▪ Systems ▪ Failure to rescue ▪ Best practice ▪ EBP ▪ Delegation ▪ Communication 	<p>They look at job stress, organization commitment, clinical decision-making, and behavior in the professional role. Tools include:</p> <ul style="list-style-type: none"> ▪ Porter and Steers Organizational Commitment ▪ Jenkins's clinical decision-making ▪ Professional Nursing Behavior 	<p>12 months</p>	<p>Just finished 3 year HRSA report and have a grant for another 3 years. Are looking to possibly collaborate with NCSBN on use of our transition tool. Will focus on preceptors this time. Increase of retention; rural settings found it highly beneficial.</p>
<p>34 Bjørk, I.T. and Kirkevold, M. (1999). Issues in nurses' practical skill development in the clinical setting. <i>Journal of Nursing Care Quality</i>. 14(1), 72-84.</p> <p>Individual</p>	<ul style="list-style-type: none"> ▪ Longitudinal, videotaped interviews of 4 nurses from 8-14 months after licensure ▪ Interviews with patients and nurses ▪ Practicing skills of dressing changes and ambulation 	<p>N/A</p>	<ul style="list-style-type: none"> ▪ Videotapes ▪ Interviews with patients and nurses 	<p>Had short orientation of 3 weeks</p>	<p>While the nurses became more efficient, they made the same omissions after 14 months:</p> <ul style="list-style-type: none"> ▪ Contaminated wounds ▪ Misuse of gloves ▪ Failed to wash hands ▪ Dangerous tube removal ▪ Interviews with patients showed caring over the year ▪ Inadequate physical support during ambulation ▪ Privacy not maintained <p>Conclusion: Limited orientation/transition program did not allow for reflection and/or feedback so that the same errors were made. Results are relevant for regulation and public protection.</p>

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<p>35 Children's Memorial Hospital, Chicago:</p> <p>Halfer, D. (2007). A magnetic strategy for new graduate nurses. <i>Nursing Economics</i>. 25(1), 6-11.</p> <p>Individual</p>	<p>Designed an internship program to bridge the gap between the academic and service settings. Based on Benner's and Kramer's classic research. Program includes 80 hours of classroom content. Unique aspects include: Web-based delivery of content; professional transitioning that allows for a safe environment for sharing mistakes they made or almost made; opportunities to rotate throughout clinical areas; phased preceptor model; preceptors receive 5% hourly pay differential; code debriefing for support.</p>	<ul style="list-style-type: none"> ▪ Classroom learning: <ul style="list-style-type: none"> ▪ Family ▪ Assessment ▪ Safety ▪ Pain ▪ Abuse ▪ Diversity ▪ Skills labs ▪ Precepted orientation ▪ Professional transitioning sessions ▪ Clinical learning exchanges ▪ Clinical mentors ▪ Code debriefing 	<p>Recruitment and retention</p>	<p>1-year program</p>	<ul style="list-style-type: none"> ▪ Recruitment increased by 28%. ▪ 7% reduction in nurse vacancy rate. ▪ Decrease in turnover from 29.5% to 12.3%. ▪ Cost savings of \$707,608 per year. ▪ Steadily improved nurse satisfaction.
<p>36 Dartmouth-Hitchcock Transition program:</p> <p>Beyea, S.C., von Reyn, L., and Slattery, M.J. (2007). A nurse residency program for competency development using human patient simulation. <i>Journal for Nurses in Staff Development</i>. 23(2), 77-82.</p> <p>Individual</p>	<p>To date, 375 residents have been through this residency program. There is a didactic portion of the program and various tracks of the program. Classes include about 40 hours of didactic content and 40 hours of simulated learning. The uniqueness of this program is the focus on simulation, and especially for low frequency, but high risk events.</p>	<ul style="list-style-type: none"> ▪ Preceptor assigned in first week. ▪ Ongoing support of preceptor, clinical education, clinical specialist after program ends. ▪ Didactic includes: health systems, information management, safety, and clinical/functional. ▪ Focus on improving novice response to "failure to rescue." ▪ Reflection/debriefing focus. ▪ Focus on high-risk, low frequency situations, as well as high frequency, commonly occurring clinical events. ▪ Didactic concepts include: <ul style="list-style-type: none"> ▪ Systems ▪ Information management ▪ Safety ▪ Functional 	<ul style="list-style-type: none"> ▪ Weekly self-rating of confidence, competence, readiness for independent practice. ▪ Nurse Resident's Readiness for Entry into Practice Competence Questionnaire, adapted from Babenko-Mould's Self-Efficacy for Professional Nursing Competencies Instrument. ▪ Weekly simulator evaluation. 	<p>12 weeks, though institution provides ongoing support</p>	<ul style="list-style-type: none"> ▪ Personal communication: Hospital mortality and cardiac arrests fell after program instituted... however these data should be cautiously considered because at the same time the organization started an early response team. ▪ All three measures of confidence, competence, and readiness to practice increased significantly after the program. ▪ Great improvement in IV medications, use of equipment and response to physiologic emergencies after program (attributed to simulations).

Project	Description	Elements	Measurement	Length	Status/Results
<p>37 del Bueno, 2005. A crisis in critical thinking. Nursing Education Perspectives. 26(5), 278-282.</p> <p>Individual</p>	<p>Description of ongoing work with the Performance Based Development System (PBDS), used in 350 health care agencies and 46 states.</p>	<ul style="list-style-type: none"> ▪ Clinical reasoning/critical thinking. ▪ Clinical coaching. ▪ Nontraditional strategies (not spelled out). ▪ Patient situations that require application, analyzing, and synthesis. 	<p>Analysis of PBDS tools</p>	<p>10-12 weeks find positive results</p>	<ul style="list-style-type: none"> ▪ 35% of graduates met employer expectations for clinical judgment. ▪ Examples given where 50% of the new nurses would miss recognizing life-threatening situations.
<p>38 Ebright, Urden, Patterson and Chalko (2004). "Themes Surrounding Novice Nurse Near-Miss and Adverse-Event Situations"</p> <p>Individual</p>	<p>Purpose of the study was to identify the human performance factors that characterized novice nurse near-miss/adverse-event situations in acute care.</p> <p>Experience since completion of a nursing program ranged from 6 months to 12 months.</p>	<p>N/A</p>	<p>8 Retrospective interviews of novice nurses about details of near-miss or adverse-event situations. Interview team consisted of:</p> <ul style="list-style-type: none"> ▪ Faculty member with expertise in complexity ▪ Faculty member with expertise in critical care and the human performance framework ▪ PhD prepared engineer with expertise in human performance 	<p>Findings suggest support up to 1 year following graduation.</p>	<p>Themes surrounding near-miss/adverse-event cases:</p> <ul style="list-style-type: none"> ▪ 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 ▪ Novice assisting novice <p>Of the 12 recruited participants, 7 had at least 1 near-miss event, and 1 provided 2 events. Most, but not all, errors were related to medication administration. Study pointed out the importance of novice nurses being able to reflect about their own patient situations and those of others.</p>

Project	Description	Elements	Measurement	Length	Status/Results
<p>39 Elfering, A., Semmer, N.K. & Grebner, S. (2006). Work stress and patient safety: Observer-rated work stressors as predictors of characteristics of safety-related events reported by young nurses. <i>Ergonomic</i>, 49(5-6). 457-469.</p> <p>Individual</p>	<p>Study conducted in 19 hospitals in Switzerland for a period of 2 working weeks on 23 novice nurses (first 18 months). Stressful events were recorded by the novice nurses, and chronic work characteristics were rated by trained observers, thus providing more validity to this study than those with only self-reports.</p>	N/A	<p>Participants were instructed to document every stressful situation they experienced, requiring an open-ended discussion followed by quantitative items. Compliance with safety regulations was measured with one item, and observers rated chronic job stressors and control on the Instrument for Stress Oriented Task Analysis. Observations were complemented by interviews with the employee, supervisors, and colleagues and consulting with organization documents, if necessary.</p>	N/A	<ul style="list-style-type: none"> ▪ 62 events, or 2.65 events per person, were related to patient safety ▪ Safety events included: documentation, near misses with medication, incomplete patient briefing, delays in care, patient casualties (falls, etc.). ▪ Stressors, most notably concentration demands and lack of control, related endangered patient safety. ▪ Recommendation: training of novice nurses should address the association between workload and patient safety and should education nurses in self-management strategies for stress.
<p>40 Halfer, D., Graf, E. & Sullivan, C. (2008). The organizational impact of a new graduate pediatric mentoring program. <i>Nursing Economics</i>, 26(4), 243-249.</p> <p>Individual</p>	<p>This is further research from the Children's Memorial Hospital program in Chicago, Illinois. The study compared 84 new graduates that were in the pre-implementation group (hired between September 2001 and August 2002) and 212 in the post-implementation group of the internship program (hired between September 2003 and August 2005). This study was unique in that it compared graduates who had an internship program with those who did not. They reported from the literature a high replacement cost of replacing nurses who leave (\$44,000 or their annual salary).</p>	<p>See the Children's Memorial report for specifics on the internship program.</p>	<p>Halfer-Graf Job Work Environment Satisfaction Survey; reliability and validity had been established.</p>	1 year in length	<ul style="list-style-type: none"> ▪ Job satisfaction was significantly higher when the new graduates had participated in the internship program than when they had not. ▪ Pre-internship turnover was 20% compared to post-internship of 12%. ▪ It took 18 months for satisfaction to increase in some areas.

Project	Description	Elements	Measurement	Length	Status/Results
<p>41 Johnstone, M. J. and Kanitsaki, O. (2006). Processes influencing the development of graduate nurse capabilities in clinical risk management: An Australian study.</p> <p>Individual</p>	<p>Exploratory-descriptive case study approach, with qualitative and quantitative data collection and analysis.</p>	<p>Elements (from literature) of opportunities putting graduate nurses at risk for error:</p> <ul style="list-style-type: none"> ▪ Inadequate education ▪ Inadequate supervision ▪ Workplace bullying ▪ Hierarchical structures inhibiting performance ▪ Poor planning and scheduling of work ▪ Poor skill mix ▪ Heavy workload ▪ Time pressure 	<p>Over a 12-month period and in 5 phases, 6 questionnaires, focus groups, and interviews. The 4 sampling units included: graduate nurses, key stakeholders, patient outcome data, and literature. Data were analyzed using content and thematic analysis strategies. A total of 63 questionnaires were completed. Additionally, 35 focus group and individual interviews were completed with new graduates and key stakeholders. Patient outcome data included: variance analysis of planned care against outcome; number of incident reports, patient complaints and patient feedback.</p>	<p>N/A</p>	<ul style="list-style-type: none"> ▪ “Deficit education” is not appropriate for teaching new graduates to avoid errors. That is, don’t provide education with the idea that there is a knowledge deficit. Instead, the experiential aspects must be stressed. ▪ None of the graduates, having been introduced to clinical risk management, was directly involved in a preventable adverse event resulting in patient harm. ▪ New graduates personal characteristics for managing risks include: <ul style="list-style-type: none"> ▪ Being (hyper)vigilant of limitations as a beginner. ▪ Asking for assistance without fearing they’d be perceived as “not coping.” ▪ Actively seeking supportive supervision. ▪ Actively seeking to decrease their workload.

Project	Description	Elements	Measurement	Length	Status/Results
<p>42 Johnstone, M. J. and Kanitsaki, O. Johnstone, M. and Kanitsaki, O. In press. Patient safety and the integration of graduate nurses into effective organisational clinical risk management systems and processes: an Australian study. <i>Quality Management in Health Care</i> [Accepted 21 May, 2007]</p> <p>Individual</p>	<p>Exploratory descriptive case study:</p> <ul style="list-style-type: none"> ▪ 2 cohorts of graduate nurses undertaking a 12-month graduate nurse transition program ▪ Key stakeholders ▪ Outcomes data ▪ Literature review 	N/A	<p>Quantitative and qualitative data collection and analysis strategies were used. 12-month period in 5 phases. 6 survey questionnaires and 35 in-depth individual and focus group interviews.</p>	<p>Sample took part in a 12-month transition program. Clinical risk management was integrated by students within 3-4 months.</p>	<ul style="list-style-type: none"> ▪ Novice nurses were able to integrate patient safety with the system, during this 12-month program, within 3-4 months. ▪ Incident reporting increased from 2.6% at first to 9.8% over the 12 months because at first the novice nurses were reluctant to report incidents, but with support in learning about risk management they learned to complete incident reports. ▪ Key indicators validating that novice nurses developed this integration included familiarity with: <ul style="list-style-type: none"> ▪ Geographical layout of hospital ▪ Hospitals' policies regarding patient risk assessment tools ▪ Processes of evidence-based practice ▪ Incident reporting
<p>43 Johnstone, M. J., Kanitsaki, O. and Currie, T. (2008). The nature and implications of support in graduate nurse transition programs: An Australian study. <i>Journal of Professional Nursing</i>, 24(1), 46-53.</p> <p>Individual</p>	<p>Exploratory-descriptive case study approach, incorporating both qualitative and quantitative analysis. The study was conducted over 12 months.</p>	N/A	<p>Used 6 survey questionnaires to neophyte nurses. Descriptive data was sought on: graduate nurse self reported confidence and competence, particularly with safety, evidence-based practice, managing risk in patients, seeking advice, recognizing limitations, making decisions, reporting incidents, and understanding risk management. Additionally, 35 individual and focus group interviews were conducted.</p>	<p>The period of support was largely dependent on the graduate, though they recommended at least 4 months duration.</p>	<p>Definition of support (p. 52): 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> <p>Support themes:</p> <ul style="list-style-type: none"> ▪ Availability ▪ Approachability ▪ Being able to ask questions ▪ Prompted to engage in best practices ▪ Benevolent surveillance ▪ Feedback ▪ Given reassurance ▪ Backup ▪ Reflection (they call it "debriefing")

Project	Description	Elements	Measurement	Length	Status/Results
<p>44 Latham, C., Hogan, M., Ringl, K. (2008). Nurses supporting nurses: Creating a mentoring program for staff nurses to improve the workforce environment. <i>Nursing Administration Quarterly</i>, 32(1), 27-39.</p> <p>Individual</p>	<p>A 3-year academic-hospital partnership was developed to create a mentoring program for nurses to improve the workplace environment: Nurses Supporting Nurses. This program was targeted for new graduates and new hires, though any staff RN was welcome to apply for the mentee role. Ninety two mentor-mentee teams were formed. The program was particularly focused on changing the culture of the workplace. Two hospitals with quite different organizational characteristics were utilized for the project. The purpose was to identify future bedside leaders who would assume supportive roles, thereby changing the culture of the unit.</p>	<ul style="list-style-type: none"> ▪ Hospital liaison to champion the project, and this liaison was key to the success. ▪ Interactive workshops on culture mindedness, which included team building. ▪ Creation of detailed Web pages, including videoclips of mentors. ▪ Sociometric analysis of RN camaraderie and informal leadership. ▪ Educational sessions on nurses supporting nurses. ▪ Cultural competence was presented. ▪ Speed meetings to help select mentors. ▪ Other sessions included team building, conflict resolution, communication, time management, healthcare system, financial concerns, quality care, patient satisfaction, and safety. ▪ Quarterly mentor support meetings. 	<ul style="list-style-type: none"> ▪ Overall nurse satisfaction ▪ Decisional involvement ▪ Cultural communication competency ▪ Retention and vacancy ▪ Patient satisfaction with nursing care ▪ 3 nurses sensitive areas, including falls, pressure ulcer prevention, and proper use of restraints 	<p>3-year</p>	<ul style="list-style-type: none"> ▪ Personality and learning styles are not the basis of successful mentor-mentee teams. ▪ Most nurses believed they were culturally competent and that the environment supported cultural sensitivity. ▪ Most nurses wanted more control over their working conditions. ▪ Improvements in patient and nurse satisfaction. ▪ Improvement in nurse vacancy and turnover. ▪ Improvement related to fall and pressure ulcer prevention and on the proper use of restraints. ▪ Using \$100,000 per RN replacement charge, the 2 hospitals had a cost savings of \$2.5 million.

Project	Description	Elements	Measurement	Length	Status/Results
<p>45 Launch into Nursing: a collaboration between the University of Texas M.D. Anderson Cancer Center and The University of Texas Health Science Center at Houston, School of Nursing.</p> <p>Keller, J. L., Meekins, K. and Summers, B.L. (2006). Pearls and pitfalls of a new graduate academic residency program. <i>JONA</i>. 36(12), 589-598.</p> <p>Individual</p>	<p>Describe the design of a collaborative academic residency program for graduate nurses.</p>	<ul style="list-style-type: none"> ▪ Academic leadership course has become cornerstone. Also included simulations, including "Friday Night in the ER." ▪ Introduction to workplace resources, which included projects, small group discussions, introductions to a variety of roles, etc. ▪ Socialization was very important, as it has been cited as linked to retention and safety. ▪ Each was matched to a trained "clinical coach." <p>Describes their curriculum map in detail. Will be helpful with module design. Areas from curriculum map include:</p> <ul style="list-style-type: none"> ▪ Communication ▪ Systems thinking ▪ Safety ▪ EBP ▪ Socialization ▪ QI 	<p>Outcomes measured, with various tools:</p> <ul style="list-style-type: none"> ▪ Progress to competent nurse (Benner) ▪ Knowledge ▪ Retention ▪ Intent to leave ▪ Job satisfaction ▪ Employee engagement ▪ Competence in clinical leadership ▪ Comprehension of Magnet essentials ▪ Evidence-based practice techniques ▪ Commitment to lifelong learning ▪ Culture of support ▪ Cultural competency ▪ Role as patient advocate ▪ Successful acculturation ▪ Accountability 	<p>12 months</p>	<ul style="list-style-type: none"> ▪ Education, at its best, cannot prepare for acculturation into a work group, using a newly learned language in practice, becoming proficient in a wide range of absolutely necessary skills, and gaining a sense of the wider world of health care. ▪ Incorporates reflection and feedback ▪ Turnover at 1 year was 10.8% ▪ Cost was \$1,000 per resident ▪ Estimated that cost of replacing 1 nurse was \$60,000
<p>46 Merry, M.D. & Brown, J.P. (2001). From a culture of safety to a culture of excellence: Quality science, human factors, and the future of healthcare quality. <i>Journal of Innovative Management</i> , 7(2), 29-46.</p> <p>Individual</p>	<p>Report of the sigma gap in health care, which is the gap between performance and potential performance.</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>Airlines – 0.43 deaths per million passengers Hospitalizations – 2,300 deaths due to error per million admits</p>

Project	Description	Elements	Measurement	Length	Status/Results
<p>47 Orsolini-Hain, L. and Malone, R. E. (2007). Examining the impending gap in clinical nursing expertise. Policy, Politics & Nursing Practice. 8(3), 158-169.</p> <p>Individual</p>	<p>Literature review describing the impending expertise gap in clinical nursing, as a result of the nursing shortage, the aging and retiring workforce, nursing's desirability as a profession, the aging faculty, and the faculty shortage.</p>	N/A	<p>Excellent review of the literature, with citing of evidence and figures to make their point.</p>	<p>Recommend a state-mandated yearlong mentorship or residency program for new graduate nurses.</p>	<ul style="list-style-type: none"> ▪ From literature review concluded that graduates need "several months" (p.162) to become minimally proficient and to feel confident about decision making. ▪ When new graduates miss life-threatening events (as cited above from del Bueno research), they can put patients at risk. Cite statistics where once CPR is needed, 27% of adults and 18% of children survive. ▪ In the late 1980s 4.5% of nurses were employed outside of nursing; by 2004 that has risen to 16.8%.
<p>48 Methodist Hospital of Houston and the University of Texas, Houston, Health Science Center:</p> <p>Pine, R. and Tart, K. (2007). Return on investment: Benefits and challenges of a baccalaureate nurse residency program. Nursing Economics. 25(1), 13-18, 39.</p> <p>Individual</p>	<ul style="list-style-type: none"> ▪ Has joined the UHC/AACN Consortium, so participants are BSN educated. <p>A unique aspect of this UHC/AACN program is that ADN/diploma educated nurses have also had a precepted program for up to 6 months.</p>	<p>See UHC/AACN for elements.</p>	<p>See UHC/AACN.</p>	<p>1-year program</p>	<p>Besides aggregate results as reported by UHC/AACN, for this particular organization:</p> <ul style="list-style-type: none"> ▪ Turnover <p>The return of investment was \$823,680 (benefit) ÷ \$93,100 (cost) =8.847 or ROI (%) of 884.7</p>
<p>49 Sir Charles Gairdner Hospital Centre for Nursing Education, Australia</p> <p>Individual</p>	<p>Designed to guide the newly graduated registered nurse through the first year of practice. It provides a supportive and structured learning environment, allowing nurses to develop. This program is unique in that nurses must meet their outcomes and then receive a certificate for satisfactory performance.</p>	<ul style="list-style-type: none"> ▪ Specific program and participant outcomes ▪ Specific prerequisites ▪ 6 months of surgery and 6 months of medical ▪ Study days and graduate seminars ▪ Assigned preceptor 	<p>Professional development journal contains:</p> <ul style="list-style-type: none"> ▪ Checklists ▪ Self-evaluation ▪ Preceptor feedback ▪ Skills acquisition sheet ▪ Self-directed learning package record ▪ Specialty achievement record 	<p>12-18 months of practice</p>	<p>No results yet, but will forward them to NCSBN.</p>