Objectives
1. Identify key drivers on the local and national level for transition to practice programs
2. Outline the transition to practice and professional integration experience of new nurses
3. Discuss the current state of the science regarding nurse residency program structure, process, and outcomes
4. Describe critical elements for Nurse Residency Program success
5. Summarize future direction for Nurse Residency Programs

Current Evidence
- Turnover can be as high 61% in the first year of practice
- New graduates experience persistent high levels of stress for first 6-9 months
- High levels of stress → increased risk for breaches in patient safety and increased practice errors
- Development of clinical judgment takes 12-18 months
- Transition to practice takes 9-12 months

Startling Facts: NCSBN
- > 40% of newly licensed nurses report medication errors
- 50% of newly licensed nurses would fail to recognize life-threatening complications

New Graduates and Safety
- Biggest fear: making mistakes, missing critical elements of patient care, fear of not performing well
- Positive work relationships and approachability of experienced nurses → fewer errors and faster transition
- Lack of approachability → increased errors
  Romyn et al. (2009)

What new graduates say ...
1. Colliding expectations: difference between school and practice
2. Need for speed: rapid role assimilation, pressured to take a full patient load, take on management responsibilities too soon
3. You want too much: stress with no reward, work overload, no breaks, overtime
4. How dare you: horizontal violence, verbal abuse, lack of management intervention
5. Change/hope for future

**Organizational Impact of Turnover**
- Costs: recruitment, replacement, training
- Impacts quality of care, staff morale, job satisfaction
- Increases error potential
- Long-term effects on nurse workforce

**Turnover Costs**
- Every 1% increase in nursing turnover = $300,000 increase in annual budget
- A 3.5% increase in nursing turnover will cost a hospital more than $1,000,000.
  - AACN, Jones C. Revisiting nurse turnover costs, adjusting for inflation. *Journal of Nursing Administration; January 2008*
  - PricewaterhouseCoopers. *What Works: Healing the Healthcare Staffing Shortage; 2007*

**Key Drivers for Residency Programs**
- Increased turnover rates in new graduates
- Increased job stress
- Difficult work environments
- Job dissatisfaction
- Lack of transition support from preceptors, mentors, nurse managers
- Regulatory and accreditation bodies
- National reports

**Recommendations by National Stakeholders**
- NCSBN 2009: Transition programs essential for patient safety

**IOM Report (2010)**

**Recommendation 3:** Implement nurse residency programs.
State boards of nursing, accrediting bodies, the federal government, and health care organizations should take actions to support nurses’ completion of a transition-to-practice program (nurse residency) after they have completed a prelicensure or advanced practice degree program or when they are transitioning into new clinical practice areas.

**IOM Proposed Action Plan**
- Support from regulatory agencies (SBN) and accreditation bodies (Joint Commission) for nurses’ completion of a residency program (pre-licensure, APN, transitioning to new practice area)
- Redirection of graduate medical education funding from diploma nursing programs to nurse residency programs in rural and critical access areas
- Funding (health care organizations, HRSA, Medicare/Medicaid Services, philanthropic organizations) for development and implementation of nurse residency programs across all practice settings.
- Evaluate the effectiveness of the residency programs in improving the retention of nurses, expanding competencies, and improving patient outcomes
Post-Entry Competence Study
(Kearney, M. H. NCSBN, 2009)
- Qualitative study: explore characteristics of nurses from entry \( \rightarrow \) 5 years of practice; how practice changed over time and associated competencies
- 2007 Study: NLRNs were expected to practice independently in a mean of 8 days after hire; average length of transition program 4.7 weeks
- Prolonged feelings of insecurity, inability to recognize changing conditions, high-acuity environments, inability to get resources, perceived lack of support and respect from colleagues \( \rightarrow \) increased likelihood to turnover

NCSBN Transition to Practice Model
- Collaboratively implemented by education and practice
- Transition to practice: formal program designed to support new graduates during progression into practice
- Skilled preceptors
- 5 Transition Modules
  - Communication/teamwork, patient-centered care, evidence based practice, quality improvement, and informatics (IOM Competencies)
  - Feedback and reflection
  - https://www.ncsbn.org/363.htm

NCSBN TTP Model
- Transition to practice: formal program designed to support new graduates during progression into practice
- Skilled preceptors
- 5 Transition Modules
  - Communication/teamwork, patient-centered care, evidence based practice, quality improvement, and informatics (IOM Competencies)
  - Feedback and reflection
- https://www.ncsbn.org/363.htm

NCSBN Research Around TTP
- Investigating the effect of the TTP model on patient safety and quality outcomes
- Longitudinal, multi-institutional, randomized study
- Using a control group
- Across different geographic regions (IL, NC, OH) and types of organizations

Commission on Collegiate Nursing Education (CCNE)
- Established a peer review process to accredit post-baccalaureate nurse residency programs in 2008
- Program Quality: Four Standards
  - Program Faculty
  - Institutional Commitment and Resources
  - Curriculum
  - Program Effectiveness
- 9 program accredited since 2009
- University of Wisconsin Hospital and Clinics (2012)

State of the Science
- Workforce Data
- Key Research Findings from Other Studies
- Data from the Wisconsin Nurse Residency Program Study
- Program Structure of Exemplar Nurse Residency Programs Regional and National
State and National Workforce Data

Wisconsin RN Survey
• 33% of nurses who provide direct patient care plan to leave the workforce in the next 9 years
• >45% of nurses are 50 years old or older
• Job stress, physical job demands, and work environment top reasons for leaving nursing
• Recommends use of experienced nurses to mentor new graduates
• National: 87.7% of newly licensed nurses work in hospitals (Kovner et al., 2007)

Compelling Outcomes of Transition Programs

• New Graduate
  • Increased job satisfaction and retention
  • Decreased stress → fewer errors
  • Enhanced clinical decision making/judgment → fewer errors
  • Enhanced performance → increased quality of care
  • Increased demonstration of professional behaviors, leadership roles

Compelling Outcomes of Transition Programs

• Organizations
  • Enhanced organizational recruitment
  • Cost savings secondary to decreased turnover → significant return on investment
  • Building capacity across the organization
  • Changing culture
  • Building cultures of retention

Professional Role Socialization

• Defined: process of acquiring and internalizing knowledge, skills, values, roles, attitudes, and norms associated with the practice of a profession
• Staged process: separation from academia, transition into practice, and identity formation/integration into professional roles and communities
• Anticipatory Socialization: Education, Personal Factors, Job Expectation
• Organizational Socialization: Structure of orientation, personal factors, environmental characteristics, organizational
• Community Socialization: Rural vs. Urban

Hallmark Study

  • http://wjn.sagepub.com/content/early/2011/07/31/019394591141555

Overview of Study

• Surveyed 34 Magnet hospitals with residency programs; surveys and site visits
• To what extent do NRPs reflect the professional socialization process described in the literature?
• Transition stage (guided practice stage; goal of skill acquisition)
• Integration stage (accountable, competent, independent practitioner and identification, assimilation, and integration into professional communities/role)
Key Findings

- Only 4 of the 34 NRPs provided evidence of multistage residency programs that included both role transition and professional integration phases of professional socialization
- One of these four was Aspirus Wausau Hospital, a participant in the Wisconsin Nurse Residency Program
- 1 year for achievement of transition (3 months) and integration (9 months)

Key Findings: Factors Promoting Transition

- Precepted experience
- Reflective/educational seminars
- Skill acquisition
- “Rites of passage” symbols—full staffing assignments, graduation ceremonies → signifying goal achievement and movement from one stage to another
- Evidence-based management projects
- Clinical coaching—mentoring sessions

Additional Factors for Success

- Supportive work environment
- Positive preceptor experience
- Comprehensive orientation process
- Sense of professionalism
- Clarity of role expectation


Nurse Residency Programs

- WI Programs
  - UHC/CCNE: UW Hospitals and Clinics
  - Wisconsin Nursing Home Residency Program at UW–Madison (Dr. Barbara Bowers)
  - Wisconsin Nurse Residency Program
  - SOAR-RN Rural Nurse Residency Program
  - Organization specific
    - Children's Hospital of Wisconsin
    - Clement Zablocki VA
  - National Programs: Versant; Rural Nurse Residency Program (online)

Pre-employment NRP (CA, 2009)

- New Graduate RN Transition to Practice Program
- Provide classroom and clinical-based experiences
- Learning plan, skill competency, meeting with faculty, work with preceptors
- Housed in schools of nursing in partnership with hospitals and community-based healthcare agencies
- Non-paid, earned academic credit and certificate of completion
- Outcomes: increased competence, confidence and employability
- http://www.cinhc.org/2012/05/study-shows-transition-to-practice-programs-gets-nurses-employed/

Funding

- US Dept. of Labor: Funding for NRP in specialty areas → medical/surgical acute care, geriatric/long term care, critical care, and transfusion nursing (CA)
- Department of Veterans Affairs Office of Academic Affiliations in collaboration with the Office of Nursing Services → providing funding for VA Post-Baccalaureate Nurse Residency programs
- Wisconsin Department of Health, Division of Quality Assurance from the Civil Monetary Penalty Fund (UW-Madison)
HRSA: Nurse Education, Practice, Quality and Retention (NEPQR)

- Program addresses development and advancement of the nursing workforce
- Provides grant support for academic, service and continuing education projects designed to enhance nursing education, improve the quality of patient care, increase nurse retention and strengthen the nursing workforce
- Eligible applicants: accredited schools of nursing, health care facilities, or an academic-service partnership

Wisconsin Nurse Residency Program

- HRSA-funded 2004 –2011
- Over 1,000 participants
- Partnership between Marquette University and acute care hospitals/systems in WI and MN
- Goal: Develop and implement programs that support nurse retention and new nurse transition to practice
- Key products: Structured transition program and preceptor education (face-to-face, online)

Residency Program Elements

- Phase I Transition (Months 1-3)
  - On-unit orientation, competency building and assessment by trained preceptors
- Phase II Integration (Months 4-15):
  - Continued education through monthly seminars guided by clinical experts
  - Continued support and guidance by mentors to advance nurse residents’ professional integration

Wisconsin Nurse Residency Program Model

Program Outcomes
- Successful transition to competent practitioner
- Enhanced ability to provide quality, evidence based care
- Advanced critical thinking ability
- Improved skill in clinical decision-making
- Commitment to life-long learning
- Engagement in a clinical nurse leadership role

Legend
- Rural Wisconsin Hospitals
- Health Cooperative
- Milwaukee Hospitals
- Cumberland/NW Rural Sites
- Midstate Sites
- Aspirus Wausau Hospital
- St. Vincent, Bellin
- ThedaCare
- Certified Critical Access Hospitals
Nurse Residency Program Research 2004-2010:
- How NR change over time
- Decision-making
- Job satisfaction
- Job stress
- Nursing performance
- Organizational commitment
- What factors influence organizational commitment
- Comparison between rural and urban residents

Job Satisfaction
- *Mean scores at endpoint were significantly higher than baseline and midpoint (F(2,225) = 8.35, p < .001)

Organizational Commitment
- *Baseline mean scores were significantly higher than midpoint and endpoint (F(2,223) = 14.15, p < .001)

Clinical Decision Making
- * Mean scores at midpoint were significantly lower than endpoint (F(2,154) = 6.91, p = .001)

Job Stress
- * Endpoint mean scores were significantly lower compared to baseline and midpoint (F(2,214) = 15.64, p < .001)

Quality of Nursing Performance
- *Mean scores were significantly higher at endpoint compared to midpoint and baseline (F(2,218) = 114.71, p < .001)
## Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Significant Correlations (p &lt; .01**) (p &lt; .05*)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Decision Making</strong></td>
<td>Number of Preceptors ($r = -.28**$)</td>
</tr>
<tr>
<td></td>
<td>Performance Nursing Behaviors ($r = .42**$)</td>
</tr>
<tr>
<td><strong>Job Stress</strong></td>
<td>Clinical Decision Making ($r = -.36**$)</td>
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<tr>
<td></td>
<td>Job Satisfaction ($r = -.67**$)</td>
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<tr>
<td></td>
<td>Number of Preceptors ($r = .22**$)</td>
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<tr>
<td></td>
<td>Organizational Commitment ($r = -.32**$)</td>
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<tr>
<td></td>
<td>Performance Nursing Behaviors ($r = -.30**$)</td>
</tr>
<tr>
<td><strong>Organizational Commitment</strong></td>
<td>Job Satisfaction ($r = .45**$)</td>
</tr>
<tr>
<td></td>
<td>Performance Nursing Behaviors ($r = .19**$)</td>
</tr>
</tbody>
</table>

## Research: Rural vs. Urban Nurses

- To determine whether the experience of newly graduated nurses working in rural hospitals is different than new graduate nurses working in urban hospitals
- Research question: Do perceptions of professional practice and the work environment differ between newly licensed rural nurses and urban nurses who were participants in a nurse residency program?

## Preceptors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Significant Correlations Baseline Measures (p &lt; .01**) (p &lt; .05*)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weeks of Preceptor Supervision</strong></td>
<td>Job Stress ($r = -.16**$)</td>
</tr>
<tr>
<td><strong>Number of Preceptors</strong></td>
<td>Job Stress ($r = .16**$)</td>
</tr>
<tr>
<td></td>
<td>Job Satisfaction ($r = .12**$)</td>
</tr>
<tr>
<td></td>
<td>Clinical Decision Making ($r = -.17**$)</td>
</tr>
<tr>
<td></td>
<td>Performance Nursing Behaviors ($r = -.12$)</td>
</tr>
</tbody>
</table>

## Rural vs. Urban Differences

- Significant changes in variables over time
- Rural and urban nurses did not have significantly different patterns of change over time except for job stress related to staffing, which showed that it significantly differs depending on the setting
- Patterns are consistent with other studies and new graduate role transition theory

## Results: Differences in Job Satisfaction

- At 6 and 12 months rural nurses had significantly higher means of overall job satisfaction compared to urban nurses
- At 6 and 12 months rural nurses had significantly higher means of their satisfaction regarding their ability to provide quality care
- At 12 months, rural nurses enjoyment and time to provide care approached significant differences ($p = .011$) compared to urban nurses
Results: Differences in Job Stress

- At 6 and 12 months rural nurses had significantly lower levels of stress compared to urban nurses.
- At 12 months rural nurses had lower levels of stress related to the physical work environment and less stress related to their perception of their competence and unit staffing.
Conclusions

• New graduate experience in rural hospitals is not as stressful as in urban hospitals → less turnover potential
• Rural nurses appear to be more satisfied in their job, particularly in their ability to deliver quality care → less turnover potential
• Rural nurses perceive similar competency in practice compared to urban nurses
• Potential that the nurse residency program had increased effectiveness in rural setting

Insuring Success: Key Elements

Infrastructure: Stakeholder Buy-in

• Involvement of key stakeholders in program development and implementation
• Across all levels of nursing leadership and staff
• Mutual ownership of the program
• Element of the strategic plan
• Component of standard orientation → “hard-wired”
• Expectation of all new graduates

Infrastructure: Scheduling and Budgets

• Nurse residents on paid time for educational sessions
• Scheduling to insure new nurses’ ability to participate
• Establish separate cost center to protect unit-based budgets

Infrastructure: Resource Allocation and Personnel

• Dedicated transition program coordinator
• Staff development specialist
• Clearly defined role with accountability
• Respected, skilled at communication and building relationships
• Minimum of a .2 FTE/10 nurse residents
• Educators/facilitators, content experts
• Trained preceptors, mentors/coaches
Create: Based on Transition Theory

- The Stages of New Graduate Professional Role Transition (Duchsher, 2008)
- Process of becoming a professional nurse
- 3 Stages that encompass first 12-18 months of practice
  - Doing: First 1-4 months
  - Being: Next 4-5 months
  - Knowing: Final stages

Doing Stage

- Excited to move into professional role but soon realized how unprepared they are
- Surprised at intensity and workloads
- Confronted by their limited experience, lack of predictability and variability
- Performance of procedures with limited experience → risk of exposure of incompetence and reduced credibility

Elements of Doing Stage

- **Learning**: understanding expectations; linear approach to practice
- **Performing**: focused on doing their job, doing it well, completing tasks on time; performance anxiety → stress
- **Concealing**: disguise emotions, work to conceal feelings of inadequacy; skill and knowledge challenged, wavering confidence; self-deprecating for failure to recognize and intervene
- **Adjusting**: New role and responsibility; teamwork vs. individual based care
- **Accommodating**: trying to fit in; balancing professional life with personal life changes

Characteristics of Learning

- Don’t know what they don’t know
- Learning is other-directed → Adapt to ideas of others; asking the expert
- “Just show me the procedure”; “Tell me how to do it”; “What are the rules?”
- Underlying fear, concern of making mistakes, high need for validation
Being Stage
- Challenging pre-conceived notions of nursing and inconsistencies/inadequacies in the health care system
- Trying to balance professional/personal life
- Crisis of their confidence; seek validation of judgments and thought processes
- Overly vigilant supervision translated to doubt of their competency vs. feeling of abandonment if don't have access to experienced nurses
- Finally → renewal of spirit, seek new challenges, receptive to goal-setting

Knowing Stage
- Final stage: finding their professional self
- Separating, recovering, exploring, critiquing, accepting
- Moving out of the learner role → greater expectations and reduced margin of error
- Shifting alliances to professional colleagues
- Continued frustration with the system and nurses’ position within the hierarchy
- Able to answer questions and help others → “I am now saving others!”
- “I get it!”

Create: Effective Methodologies for Professional Development
- Competence: moving beyond basic skills → clinical judgment, using interpersonal connections to leverage support services → can't be learned from classes whereby the nurse is the passive recipient of knowledge
- Methods that focus on self-reflection, debriefing, talk-aloud
- Extended access to experienced nurses (coaches or preceptors)
- NCSBN Post-Entry Competence Study, 2009

Sustain: Build Own Evidence
- HR to track new graduate data
- Track NR progress through the organization including demographic data, movement in the organization, and retention data
- Implement exit interviews/surveys to determine why new graduates leave the organization
- Compile reports for leadership

ROI
- [http://www.aacn.nche.edu/leading-initiatives/education-resources/nrp-tool-kit](http://www.aacn.nche.edu/leading-initiatives/education-resources/nrp-tool-kit)
- Calculated based on
  - New graduate turnover
  - New graduate hires
  - Potential turnover
  - Nurse replacement costs
  - Program costs

Residency Program Research
- Variability in definitions, structure, methodologies
- Insufficient best practices
- Insufficient evidence as to efficacy
- Insufficient evidence regarding impact on quality and patient outcomes
Research Related to the Role of Preceptors and Mentors

- Variability in definitions, structure of their roles
- Insufficient best practices related to training
- Insufficient evidence as to efficacy
- Insufficient evidence regarding impact on new graduate transition
- Insufficient evidence regarding impact on quality and patient outcomes

Outcome Assessment

- Quantitative and qualitative methods
- Process and outcomes assessment
- Establishment of best practice
- Collaborate with academic partners to conduct research and write grants
- Co-PI
- Capitalize on academic setting resources
- IRB approval

Outcomes: Quantitative

- Retention
- Indicators of professional development
- Competency: clinical decision-making, quality of care
- Practice environment
- Incidence of errors
- Patient safety
- NDNQI
- Patient Satisfaction
- Physician Satisfaction

Outcomes: Qualitative

- Perceptions of program outcomes
- Focus group data
- Resident journals/clinical narratives
- Interviews with stakeholders
  - Program participants
  - Nurse managers
  - Staff educators
  - Preceptors
  - Mentors

Program Model

- SOAR-RN: Sustaining Onboarding And Retention of Rural Nurses
- Evidence-based, customized transitioning program for rural nurses delivered on-site to rural hospitals
- Rural Collaboratives and Academic Partners
  - Illinois Critical Access Hospital Network
  - Illinois State University
  - Ministry Health Care, WI
  - Rural Connection, ID
  - Boise State University

SOAR-RN Nurse Residency Program

- Preceptor Training
  - One-day Face-to-Face Workshop
  - Online Modules

SOAR-RN

- Coaching Training
  - One-day Face-to-Face Workshop

Coaches

- New Rural Nurses
- Confidence
- Competence
- Knowledge
- Practice
- Interactions in Practice Environment
- NDNQI
- Patient Safety
- Physician Satisfaction
- Practice Setting or Climate

Components

- Methodology

Training / Education Outcomes

Project Outcomes
Conceptual Model for Program Development

- Summary of elements that drive rural nursing practice
  - Rural health
  - Rural persons
  - Rural environment
  - Rural nursing
- Evidence-table regarding existing nurse residency programs
  - Outcomes
  - Structure and methodologies

Research Purpose

- Primary purpose: Test the efficacy of the SOAR-RN Program to achieve program outcomes
- Secondary purpose: Establish reliability and validity of an instrument to assess preceptors’ role competency

SOAR-RN Program Outcomes

- Preceptors and mentors will have increased role competency, role commitment, and perceived role support
- Nurse residents will have enhanced role transition and job satisfaction, and decreased job stress and intent to leave
- Nursing staff (including preceptors, mentors, and nurse residents) will have increased perceptions of an effective work environment and a culture that supports safety

Sample

- Rural hospitals
- Nurses employed in the hospitals that are involved in the SOAR-RN residency program
  - Nurse residents
  - Preceptors
  - Mentors
  - Nurse managers/administrators
  - Educators,
  - Nurse direct care providers

Methodology

- Quasi-experimental longitudinal design comparing pre-program (baseline) and post-program outcome variables over a three-year period
- Data collected at SOAR-RN program starts up in the organization (baseline), and at yearly intervals
- Data collection via teleformatted paper surveys
Nurse Resident Measures

- Organizational Commitment (Mowday & Steers, 1979)
- Nurse Job Satisfaction Scale
- Job Stress Scale (Hinshaw & Atwood, 1985)
- New Graduate Nurse Transition to Practice Scale (Kamphuis, 2004)

Preceptor Measures

- Preceptor Performance Assessment Scale (Investigator developed)
- Commitment to the Preceptor Role Scale (Dibert & Goldenberg, 1995)
- Preceptor’s Perception of Support Scale (Dibert & Goldenberg, 1995)

Mentor Measures

- Mentor Role Assessment Instrument (Investigator developed)
- Commitment to the Mentor Role Scale (Dibert & Goldenberg, 1995)
- Mentor’s Perception of Support Scale (Dibert & Goldenberg, 1995)

Nursing Staff Measure: Practice Environment Scale (Lake, 2002)

- Nurse Participation in Hospital Affairs
- Nursing Foundations for Quality of Care
- Nurse Manager Ability, Leadership, and Support of Nurses
- Staffing and Resource Adequacy
- Collegial Nurse-Physician Relations

Nursing Staff Measure: Hospital Survey on Patient Safety (Sorra JS, Nieva VF, AHRQ, 2004)

- Frequency of event reporting
- Overall perceptions of safety
- Patient Safety Grade
- Number of events reported
- Supervisor/Manager expectations & actions promoting safety
- Organizational learning – continuous improvement
- Communication openness
- Feedback and communication about error
- Non-punitive response to error
- Staffing
- Hospital management support for patient safety
- Teamwork across hospital units
- Hospital handoffs & transitions

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