Building a Nurse Residency Program: Lessons learned from a pilot study

Mayo Clinic, Rochester, Minnesota Nurse Residency Program

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Disclosures

The speakers have nothing to disclose
Objectives

• Discuss available resources utilized in the development of a nurse residency curriculum
• Create innovative teaching/learning strategies
• Analyze the usefulness of survey tools and metrics used to evaluate a nurse residency program pilot
• Perform a basic return on investment (ROI) evaluation of a program
Pilot Design

• Randomly selected participants:
  ▪ 27 Nurse Residents, all baccalaureate NLRNs
  ▪ 81 Control Group, all baccalaureate NLRNs

• Nurse Residents attended 8 hour, monthly seminars, September 2012 through May 2013
Program Goal: Support newly licensed nurses during their critical transition and progression into professional nursing practice.

Program Design: Based on standards developed by Commission on Collegiate Nursing Education (CCNE) for a residency program.
Program Objectives

• Transition from entry-level, advanced beginner nurse to competent professional nurse who provides safe, quality care.

• Develop effective decision-making skills related to clinical judgment and performance.

• Develop strategies to incorporate research-based and other evidence into practice.

• Develop clinical leadership skills at the point of patient care.

• Formulate an individual career plan that promotes a life-long commitment to professional nursing.

CCNE, 2008
Outcome Measures

• Intervention Group and Control Group
  ▪ Comparative research design
  ▪ Mixed-methods: qualitative and quantitative
  ▪ Longitudinal data collection
Building a curriculum

• Theoretical Framework: Dr. Judy Boychuk
  Duchscher’s Transition Theory

• Profession’s resources & recommendations

• Internal & external benchmarking

• Institutional priorities
Transition Management

- Communication
- Leadership
- Systems Thinking
- Evidence Based Practice
- Quality & Safety
- Clinical Knowledge
Teaching methodologies

• Active learning

• Application to “real” practice

• Peer support
# Evaluating the program

- Align measurements with objectives
- Research Tools

<table>
<thead>
<tr>
<th>Objective</th>
<th>Outcome measure</th>
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<tbody>
<tr>
<td>Transition</td>
<td>The Graduate Nurse Experience Survey (Casey-Fink)</td>
</tr>
<tr>
<td>Clinical Judgment</td>
<td>California Critical Thinking Disposition Inventory (CCTDI)</td>
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<tr>
<td>EBP</td>
<td>Evidence-Based Practice Questionnaire (EBPq)</td>
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<tr>
<td>Leadership</td>
<td>Gerber Control Over Nursing Practice (CONP)</td>
</tr>
<tr>
<td>Professional Career Plan</td>
<td>Professional Practice Environment Assessment Scale (PPEAS)</td>
</tr>
</tbody>
</table>
Transition

- The Graduate Nurse Experience Survey (Casey-Fink)
  - Surveyed 3 times
  - Residents experienced significant (p>0.05) improvement in most sub-scales
  - Residents experienced more improvement than control

- Focus groups
  - Peer support considered most important part of program
Clinical Judgment

• California Critical Thinking Disposition Inventory (CCTDI)
  ▪ Surveyed 2 times
  ▪ Truth-seeking subscale notably lowest initially for both groups, improved slightly, and Residents improved more

• Casual observation
  ▪ Simulation
  ▪ Small group conversations
EBP

• Evidence-Based Practice Questionnaire (EBPq)
  ▪ Surveyed 2 times
  ▪ Knowledge subscale improved much more (p=0.008) for Residents than for Control
  ▪ Attitude subscale actually worsened (!)

• EBP Projects & Presentations
Leadership

• Gerber Control Over Nursing Practice (CONP)
  ▪ Surveyed 2 times
  ▪ Small improvement in overall score
  ▪ Small improvement in coordination of care & accountability for nursing actions subscales

• Longitudinal data collection
  ▪ Unit-based leadership positions
  ▪ Academic advancement
  ▪ Scholarly activities
Professional Career Plan

• Professional Practice Environment Assessment Scale (PPEAS)
  ▪ Surveyed 1 time
  ▪ Much of survey measures elements outside the scope of the program

• Developed Career Plan
  ▪ Used planning tool
  ▪ Shared plans with Nurse Managers
Becoming business savvy

• Calculating the ROI (Return on Investment)
  ▪ Turnover rate = cost of orientation/training per nurse \( \times \) # of nurses who leave institution

• Gaining executive approval and budget

• Marketing the program to prospective Residents as well as internally to stakeholders
### Human Resources

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Curriculum Development (# of Nurse Educators) x salary/hourly wage</td>
<td>$$ $$</td>
</tr>
<tr>
<td>Program Coordinator(s) (# of Coordinators at # hours/FTE) x salary/hourly wage</td>
<td>$$ $$</td>
</tr>
<tr>
<td>Session Facilitators (# of Nurse Educators at # hrs per session x # of sessions) x salary/hourly wage</td>
<td>$$ $$</td>
</tr>
<tr>
<td>Administrative Assistant support (# of AAs at # FTE) x salary/hourly wage</td>
<td>$$ $$</td>
</tr>
<tr>
<td># of Nurse Residents x # hours spent in program FTE x hourly wage</td>
<td>$$ $$</td>
</tr>
<tr>
<td><strong>HUMAN RESOURCES TOTAL</strong></td>
<td>$$ $$</td>
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### Other Possible Human Resources to Consider

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Nurse Residency Program Advisory Board members</td>
<td>$$ $$</td>
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<tr>
<td>Nurse Researcher's &amp; Statistician time</td>
<td>$$ $$</td>
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### Capital Resources

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Costs of survey research tool fees x # of subjects</td>
<td>$$ $$</td>
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<tr>
<td>Classroom Usage Charges x # hours used</td>
<td>$$ $$</td>
</tr>
<tr>
<td>Final celebration (catering costs)</td>
<td>$$ $$</td>
</tr>
<tr>
<td>Advertising and Marketing costs</td>
<td>$$ $$</td>
</tr>
<tr>
<td>Media Support Services (creating posters, photocopies)</td>
<td>$$ $$</td>
</tr>
<tr>
<td><strong>CAPITAL TOTAL</strong></td>
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<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Costs of classroom supplies used for training</td>
<td>$$ $$</td>
</tr>
<tr>
<td>Costs of medical supplies used for training</td>
<td>$$ $$</td>
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### TOTAL EXPENSES

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<tr>
<th>Description</th>
<th>Cost</th>
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<tr>
<td></td>
<td>$$ $$</td>
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### EXPENSE per RESIDENT

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<tr>
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<th>Cost</th>
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<td></td>
<td>$$ $$</td>
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Lessons Learned:

• Choose *and use* a conceptual framework!
• Build your curriculum to meet institutional needs and standards as well as external
• Choose your outcomes measurement tools wisely (and don’t accidentally bias your subjects!)
• Have fun! Be creative!
• It’s OK to make mistakes, but learn from them
• Learn the business side and sell it
Contact us

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