Optimizing Hospital RN Role Competency Leads to Improved Patient Outcomes

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Objectives

• Describe pre/post evaluation results:
  – of a one year program for a population of IICU (Progressive care) nurses
  – on four units at an academic medical center
  – to improve patient outcomes
  – through improved professional role competency
Stanford Hospital & Clinics: Nursing

- 1,730 Clinical Registered Nurses & 119 Advanced Practice Professionals

**Inpatient Nursing** (422 beds)
- Nursing Practice & Education
- Research/Evidence-Based Practice
- Nursing Quality
- Advanced Practice Providers

**Emergency Department** (54,000 visits)
- Clinical Inpatient Access
  - Transfer Center
  - Life Flight
  - Patient Placement
  - Crisis RNs
  - Administrative Nursing Supervisors

**Infection Prevention & Control**
- Case Management

**Outpatient Clinics** (490,000 visits) - Centers of Excellence
- Cardiology
- Neurosciences
- Orthopedics
- Cancer Care

**Perioperative Services**
- (2,100 annual procedures)
  - Ambulatory
  - Main OR
  - PACU
  - Satellite

- [www.stanfordhospital.org/nursing](http://www.stanfordhospital.org/nursing)
Problem Overview:

Key Issues

- Internal assessment of nurse-sensitive outcomes prior to magnet redesignation revealed uneven performance despite
  - Active nursing quality program
  - Multiple education resources for nurse-sensitive indicators
  - Experienced nursing leadership and stable workforce
  - Professional Practice Model revision revealed gaps in nurse understanding of core professional role and practice concepts
  - External Future of Nursing recommendations focused on optimized role capacity, scope of practice, preparation for leadership roles
• Nurses must exhibit professional role competency to fully realize the Institute of Medicine’s Future of Nursing goals regarding full scope of practice and enhanced leadership roles.¹

• Uneven performance on nurse-sensitive indicators (outcomes) was a symptom of confusion about nurse role accountability, responsibility and authority resulting in a task-based versus professional focus. This role confusion was felt to be a barrier to optimizing RN scope that leads to practice excellence.

• Reinvesting in professional role development of nurses, both nurse leaders and staff, via a role competency program² created opportunity to reset professional role standards. O⁵ used as overacting role clarity framework for role development
Conceptual Model

Role Clarity → Practice → Outcomes

O’Rourke Patient Care Model™

O’Rourke Model of the Professional Role™

**Leader**
- Decision Maker
- Self-Directed Autonomy
- Ethical Practice

**Scientist**
- Population-Based Thinking
- Evidence-Based Thinking

**Practitioner**
- Results Oriented Decision-Making
- Introduce Best Evidence & New Learning

**Transferor**
Communication - Therapeutic Relationships - Collaboration

Measure & Monitor Practice - The Basis of Autonomy

Results

- High Performance
- Patient Safety & Quality

Practice
Methods

- Design: pre/post professional role-based practice program
- Target Nursing units: four intermediate/progressive care units over 1 year
- Program Components (Intervention):
  - 2 days of Classroom training by Lead Coach/Peer Coach Teams for 10 cohorts of clinical nurses (n=365)
  - Clinical staff nurse completion of online professional role assessments (n=302)
  - On unit peer-coaching of role competency behaviors
  - Targeted nursing unit performance improvements
- Program effectiveness measures:
  - Classroom Training: evaluations, participant feedback, milestone completion
  - Role competency measure: On Role validated online assessment tool
  - Process Outcomes measure:
    - Individual nurse: Handovers content quality
    - Unit work environment: NDNQI Practice Environment Scale (PES)
  - Patient Outcome measure: HCAHPS patient satisfaction scores
Results

- Participation Rate: 98% staff RNs completed program
- Interventions (Education and Performance Improvement):
  - Nursing role performance objectively measured (n=302)
  - Nurse Behaviors: Shift Handovers improved for medical (dependent) and nursing (independent) functions (t<0.05)
  - Practice Environment: NDNQI Practice Environment improved on 2 of 4 units, 3 units > magnet 50th percentile
- Patient Outcome:
  - 4 nurse-sensitive patient satisfaction questions (HCAHPS) improved but not statistically significant
    - Nurse Listening: 4 units improved
    - Nurse Courtesy/Respect: 2 units improved, 1 no difference, 1 decreased
    - Toileting: 2 units that focused on this improved
    - Pain: 2 units that focused on this improved
OnSomble OnRole™ Assessment

Figure 1: IICU RN Professional Role Competency Assessment (n=302)
Handover Composition

Figure 2: Pre/Post Comparison of IICU Handover Observations (n=102)

SHC Role Based Practice Program: IICU Quality of RN Handover
Fall 2011 to Spring 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>ICU Cohorts 1 &amp; 2</th>
<th>ICU Cohorts 9 &amp; 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med: Diagnosis</td>
<td>88%</td>
<td>98%</td>
</tr>
<tr>
<td>Med: Data</td>
<td>90%</td>
<td>98%</td>
</tr>
<tr>
<td>Nsg: Stability</td>
<td>90%</td>
<td>91%</td>
</tr>
<tr>
<td>Med: Identified Changes(s)</td>
<td>49%</td>
<td>86%</td>
</tr>
<tr>
<td>Med: Teaching</td>
<td>78%</td>
<td>65%</td>
</tr>
<tr>
<td>Med: Rec</td>
<td>71%</td>
<td>89%</td>
</tr>
<tr>
<td>Med: Avg</td>
<td>90%</td>
<td>91%</td>
</tr>
<tr>
<td>Nsg: Identified Changes(s)</td>
<td>88%</td>
<td>91%</td>
</tr>
<tr>
<td>Nsg: Interdisciplinary</td>
<td>81%</td>
<td>79%</td>
</tr>
<tr>
<td>Nsg: Observation Cyde</td>
<td>71%</td>
<td>88%</td>
</tr>
<tr>
<td>Nsg: Teaching</td>
<td>51%</td>
<td>79%</td>
</tr>
<tr>
<td>Nsg: Avg</td>
<td>79%</td>
<td>87%</td>
</tr>
</tbody>
</table>
**Practice Environment Scale (PES) of ANA NDNQI™ Survey of Registered Nurses:**

- Nurse participation in hospital affairs; Nursing foundations for quality care
- Nurse manager ability, leadership, support for RNs; Staffing and resource adequacy
- Collegial nurse-physician relationships

<table>
<thead>
<tr>
<th>Unit</th>
<th>2012 Response Rate</th>
<th>2011 Mean PES</th>
<th>2012 Mean PES</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2</td>
<td>52%</td>
<td>2.56</td>
<td>2.70</td>
<td>+0.14</td>
</tr>
<tr>
<td>B3</td>
<td>70%</td>
<td>3.20</td>
<td>3.07*</td>
<td>-0.13</td>
</tr>
<tr>
<td>D2</td>
<td>95%</td>
<td>3.28</td>
<td>3.13**</td>
<td>-0.15</td>
</tr>
<tr>
<td>D3</td>
<td>93%</td>
<td>3.03</td>
<td>3.13**</td>
<td>+0.10</td>
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<tr>
<td>All SHC Units</td>
<td>74%</td>
<td>2.86</td>
<td>2.81</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

* Above Magnet 50th p ** Above Magnet 75th p
## Patient Satisfaction (Unit Level):
### Q1-2 2011 to Q4 2012-Q1 2013

**Figure 3: Change in Unit Nurse-Sensitive HCAHPS* Scores Pre/Post Program**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Nurse Courtesy/Respect (n=922)</th>
<th>Nurse Listening (n=925)</th>
<th>Help Toileting as Needed (n=596)</th>
<th>Staff do all to Help Pain (n=619)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2</td>
<td>-5.95</td>
<td>+5.45</td>
<td>+9.05</td>
<td>-6.50</td>
</tr>
<tr>
<td>B3</td>
<td>-0.60</td>
<td>+1.60</td>
<td>-2.70</td>
<td>+13.70</td>
</tr>
<tr>
<td>D2/G2</td>
<td>+1.40</td>
<td>+3.95</td>
<td>+15.05</td>
<td>-2.85</td>
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<tr>
<td>D3</td>
<td>+3.80</td>
<td>+3.10</td>
<td>-8.95</td>
<td>+7.40</td>
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</tbody>
</table>

ANOVA test for differences between Pre/Post scores set at .05 sig level, result was Not Significant

* HCAHPS (*Hospital Consumer Assessment of Healthcare Providers and Systems*)

Summary and Next Steps

• A program to enhance nurse professional role competency supported by nursing unit performance improvement actions was effective in improving staff nurse accountability for practice as evidenced by handover report observations, nursing work environment and improved nurse sensitive patient satisfaction outcomes.

• 2012-2013: Completing 12 cohorts of Medical/Surgical nurse program (additional 280 RNS) with ongoing measures and operations integration.
