Maine Nurse Competency Development: Insights, Overview, and Implications for Practice

Dr. Roxane Spitzer, Ph.D., MBA, RN, FAAN

Annual Maine Nursing Summit
March 22nd, 2017
Recap Main Pilot Objectives

Measure Maine RN’s 11 Nursing Core Competencies to identify potential areas of needs and strengths that can be addressed in training, education, and preceptor opportunities.

Identify internal champions to empower their growth from within (including the measurement of key leadership competency items).

Measure competencies related with patient satisfaction / HCAHPS scores (including the measurement of key communication competency items).

Generate competency benchmarks on individual factors such as RN education, background, or experience, and organizational factors such as shift, unit, department, hospital, or health system.

Expand data collection and competency measurement throughout Maine for broader state-wide benchmarks and recommendations.
Project Overview

Design a customizable and fully scalable measurement platform

Identify funding and grant opportunities in order to make it cost effective for all participants

Build the software solution

Identify the early adopters

Begin pilot

Maine Partners in Nursing Education and Practice
Initial RWJF Timeline

**September ’16 - November ‘16:**
*Evaluation*: Onboarding and Data Collection Phase

**December ‘16 - March ‘17:**
*Insight and Development* - Data Analysis and Tailored Education Recommendations based on initial data

**April ’17 - May ‘17**
*Re-Evaluation and Scope Expansion*: Second assessment cycle to measure results to initial educational efforts
The Early Adopters

MaineHealth
CARE AT HOME

Redington-Fairview General Hospital

TAMC
MORE THAN A HOSPITAL
EMHS MEMBER

northern maine MEDICAL CENTER

Waldo County General Hospital
MaineHealth

Pen Bay Medical Center
MaineHealth
Overall Pilot Metrics (1st Cycle)

- **172** participating RNs
- **226** RNs were involved in the assessment cycle (including supervisors, peers, and/or preceptors)
- **437** assessments were created
- **343** total assessments were completed (78.5%)
  - **141** Completed Self-Assessments (82.0%)
  - **123** Completed Supervisor Assessments (72.4%)
  - **79** Completed Peer Assessments (83.2%)
Initial State-wide Collected Data

- 7 initial organizations
- 343 total assessments were completed
- 37,730 answers were completed, measuring skills, knowledge, and behaviors
- Over 800,000 data points were collected
State-wide Competency Distribution - First Cycle

Organizational Overview

Behavior Distribution (%)

Novice
Advanced Beginner
Competent
Proficient
Expert

Professionalism
Teamwork and Collaboration
Evidence-Based Practice
Patient-Centered Care
Leadership
Communication
Systems-Based Practice
Informatics and...
Safety
Quality Improvement
Geriatrics
Hospital “A” Initial Results - First Cycle

Organizational Overview

Behavior Distribution (%)
Hospital “A” Initial Results - First Cycle

Organizational Overview

- **n = 26** baseline users
- **n = 71** assessments

**Behavior Distribution (%)**

**Novice**
- Evidence-Based Practice: 6.56

**Advanced Beginner**
- Evidence-Based Practice: 17.21

**Competent**

**Proficient**

**Expert**
Hospital “A” Initial Results - First Cycle

Organizational Overview

Behavior Distribution (%)

- Novice (Quality Improvement: 6.56%)
- Advanced Beginner (Quality Improvement: 14.43%)

n = 26 baseline users
n = 71 assessments
Hospital “B” Initial Results - First Cycle

Organizational Overview

- professionalism
- teamwork and collaboration
- evidence-based practice
- patient-centered care
- leadership
- communication
- systems-based practice
- informatics and technology
- safety
- quality improvement
- geriatrics

n = 11 baseline users
n = 33 assessments
Hospital “B” Initial Results - First Cycle

Organizational Overview

**Advanced Beginner**
Evidence-Based Practice: 28.79

**Novice**
Evidence-Based Practice: 10.61

n = π baseline users
n = 33 assessments
Hospital “B” Initial Results - First Cycle

Organizational Overview

Behavior Distribution (%)

Novice
Quality Improvement: 15.15
Hospital “C” Initial Results - First Cycle

Organizational Overview

n = 15 baseline users
n = 33 assessments
Hospital “C” Initial Results - First Cycle

Organizational Overview

n = 15 baseline users
n = 33 assessments
Hospital “C” Initial Results - First Cycle

n = 15 baseline users
n = 33 assessments
Hospital “D” Initial Results - First Cycle

Organizational Overview

- n = 32 baseline users
- n = 92 assessments
Hospital “E” Initial Results - First Cycle

Organizational Overview

n = 26 baseline users
n = 61 assessments
Hospital “F” Initial Results - First Cycle

Organizational Overview

Behavior Distribution (%)
n = 226 users
n = 343 assessments

State-wide Gap Analysis - Summary Report

360 Degree Professional Behavior Report

A
- Self: 3.99
- Supervisor: 3.55
- Direct Report: 3.93
- Peer: 3.82

B
- Self: 4.09
- Supervisor: 3.80
- Direct Report: 3.79
- Peer: 3.89

C
- Self: 3.87
- Supervisor: 3.32
- Direct Report: 4.33
- Peer: 3.84
State-wide Gap Analysis - Summary Report

n = 226 users
n = 343 assessments

360 Degree Professional Behavior Report

D
- Self: 3.78
- Supervisor: 2.14
- Direct Report: 3.60
- Peer: 3.18
- 360: 3.18

E
- Self: 3.77
- Supervisor: 2.96
- Direct Report: 4.10
- Peer: 3.61
- 360: 3.61
State-wide Gap Analysis - Summary Report

360 Degree Professional Behavior Report

- **Self**: 3.63, 3.56
- **Supervisor**: 3.48, 3.74
- **Direct Report**: 3.49, 3.65
- **Peer**: 3.54

n = 226 users
n = 343 assessments
Hospital “A” Gap Analysis
Detailed Report

New Grads

360 Degree Professional Behavior Report

<table>
<thead>
<tr>
<th>Category</th>
<th>Self</th>
<th>Supervisor</th>
<th>Direct Report</th>
<th>Peer</th>
<th>360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.50</td>
<td>2.63</td>
<td>4.12</td>
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</tr>
<tr>
<td>Professionalism</td>
<td>3.61</td>
<td>2.73</td>
<td>4.00</td>
<td></td>
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</tr>
<tr>
<td>Teamwork and Collaboration</td>
<td>3.48</td>
<td>2.93</td>
<td>4.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence-Based Practice</td>
<td>3.36</td>
<td>2.13</td>
<td>3.99</td>
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Experienced New Hires

360 Degree Professional Behavior Report

<table>
<thead>
<tr>
<th>Category</th>
<th>Self</th>
<th>Supervisor</th>
<th>Direct Report</th>
<th>Peer</th>
<th>360</th>
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</thead>
<tbody>
<tr>
<td>Overall</td>
<td>4.19</td>
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<tr>
<td>Professionalism</td>
<td>4.34</td>
<td>3.57</td>
<td>3.97</td>
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<td></td>
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<tr>
<td>Teamwork and Collaboration</td>
<td>3.91</td>
<td>3.57</td>
<td>4.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence-Based Practice</td>
<td>3.73</td>
<td>2.83</td>
<td>3.88</td>
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<td></td>
</tr>
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</table>
Hospital “A” Gap Analysis
Detailed Report

New Grads

<table>
<thead>
<tr>
<th>360 Degree Professional Behavior Report</th>
<th>Self</th>
<th>Supervisor</th>
<th>Direct Report</th>
<th>Peer</th>
<th>360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-Centered Care</td>
<td>2.87</td>
<td>3.52</td>
<td>4.22</td>
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<td></td>
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<tr>
<td>Leadership</td>
<td>2.88</td>
<td>3.51</td>
<td>4.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>3.00</td>
<td>3.58</td>
<td>4.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems-Based Practice</td>
<td>2.50</td>
<td>3.30</td>
<td>4.04</td>
<td></td>
<td></td>
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Experienced New Hires

<table>
<thead>
<tr>
<th>360 Degree Professional Behavior Report</th>
<th>Self</th>
<th>Supervisor</th>
<th>Direct Report</th>
<th>Peer</th>
<th>360</th>
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</thead>
<tbody>
<tr>
<td>Patient-Centered Care</td>
<td>3.80</td>
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<td>4.47</td>
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<td>3.52</td>
<td>3.98</td>
<td>4.11</td>
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<tr>
<td>Communication</td>
<td>3.70</td>
<td>4.05</td>
<td>4.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems-Based Practice</td>
<td>3.40</td>
<td>3.84</td>
<td>4.12</td>
<td></td>
<td></td>
</tr>
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Hospital “A” Gap Analysis
Detailed Report

New Grads

360 Degree Professional Behavior Report

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<th>Supervisor</th>
<th>Direct Report</th>
<th>Peer</th>
<th>360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatics and Technology</td>
<td>2.76</td>
<td></td>
<td></td>
<td></td>
<td>4.50</td>
</tr>
<tr>
<td>Safety</td>
<td>2.62</td>
<td></td>
<td></td>
<td></td>
<td>4.13</td>
</tr>
<tr>
<td>Quality Improvement</td>
<td>2.12</td>
<td></td>
<td></td>
<td></td>
<td>4.02</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>2.64</td>
<td></td>
<td></td>
<td></td>
<td>4.04</td>
</tr>
</tbody>
</table>

Experienced New Hires

360 Degree Professional Behavior Report

<table>
<thead>
<tr>
<th>Category</th>
<th>Self</th>
<th>Supervisor</th>
<th>Direct Report</th>
<th>Peer</th>
<th>360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatics and Technology</td>
<td>3.36</td>
<td></td>
<td></td>
<td></td>
<td>4.28</td>
</tr>
<tr>
<td>Safety</td>
<td>3.38</td>
<td></td>
<td></td>
<td></td>
<td>4.25</td>
</tr>
<tr>
<td>Quality Improvement</td>
<td>2.82</td>
<td></td>
<td></td>
<td></td>
<td>3.94</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>3.51</td>
<td></td>
<td></td>
<td></td>
<td>4.30</td>
</tr>
</tbody>
</table>

n = 26 baseline users
n = 71 assessments
Most common Novice / Beginner Behaviors - “Areas of Opportunity”

- Provides constructive feedback to peers - **Professionalism** - 31%
- Participates in professional nursing organizations - **Professionalism** - 30%
- Demonstrates knowledge of community based aging network resources including the Administration of Aging, state unit on aging, community action programs, and area agencies on aging - **Geriatrics** - 29%
- Utilizes current evidence and clinical experience to decide when to modify clinical practice - **Evidence-Based Practice** - 29%
- Participates in data collection and other research activities - **Evidence-Based Practice** - 29%
- Assigns, directs, and supervises ancillary personnel and support staff in carrying our particular roles/functions aimed at achieving care goals - **Leadership** - 25%
State-wide data: Experienced New Hires

Most common Novice / Beginner Behaviors - “Areas of Opportunity”

- Demonstrates knowledge of community based aging network resources including the Administration of Aging, state unit on aging, community action programs, and area agencies on aging - **Geriatrics** - 26%

- Evaluates consumer and family learning - **Communication** - 22%

- Participates in data collection and other research activities - **Evidence-Based Practice** - 20%

- Participates in collecting safety data - **Safety** - 20%

- Participates in the use of quality indicators and measures to evaluate the effect of changes in the delivery of care - **Quality Improvement** - 20%
Shift Comparison Report

Hospital “C”
(RNs with higher scores concentrated primarily in the night shift)

<table>
<thead>
<tr>
<th>Professional Behavior</th>
<th>Sample 1</th>
<th>Sample 2</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.69</td>
<td>4.03</td>
<td>3.86</td>
</tr>
<tr>
<td>Professionalism</td>
<td>3.73</td>
<td>4.01</td>
<td>3.87</td>
</tr>
<tr>
<td>Teamwork and Collaboration</td>
<td>3.76</td>
<td>4.08</td>
<td>3.92</td>
</tr>
<tr>
<td>Evidence-Based Practice</td>
<td>3.43</td>
<td>3.91</td>
<td>3.67</td>
</tr>
<tr>
<td>Patient-Centered Care</td>
<td>3.92</td>
<td>4.17</td>
<td>4.04</td>
</tr>
<tr>
<td>Leadership</td>
<td>3.64</td>
<td>4.04</td>
<td>3.84</td>
</tr>
<tr>
<td>Communication</td>
<td>3.79</td>
<td>4.12</td>
<td>3.95</td>
</tr>
<tr>
<td>Systems-Based Practice</td>
<td>3.73</td>
<td>4.02</td>
<td>3.88</td>
</tr>
<tr>
<td>Informatics and Technology</td>
<td>3.84</td>
<td>4.08</td>
<td>3.96</td>
</tr>
<tr>
<td>Safety</td>
<td>3.79</td>
<td>4.04</td>
<td>3.91</td>
</tr>
<tr>
<td>Quality Improvement</td>
<td>3.38</td>
<td>3.78</td>
<td>3.58</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>3.61</td>
<td>4.04</td>
<td>3.82</td>
</tr>
</tbody>
</table>

n = 32 baseline users
n = 92 assessments
Shift Comparison Report

Hospital “C”
(RNs with higher scores concentrated primarily in the night shift)

<table>
<thead>
<tr>
<th>Competency</th>
<th>Day</th>
<th>Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-Centered Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides priority-based nursing care to individuals, families, and groups</td>
<td>3.92</td>
<td>4.17</td>
</tr>
<tr>
<td>through independent and collaborative application of the nursing process</td>
<td>3.88</td>
<td>4.24</td>
</tr>
<tr>
<td>Utilizes scientific inquiry, as demonstrated in the nursing process, as</td>
<td>3.53</td>
<td>4.04</td>
</tr>
<tr>
<td>an essential tool for provision of nursing care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assesses health care situations through the consumer's eyes</td>
<td>3.75</td>
<td>4.14</td>
</tr>
<tr>
<td>Respects and encourages the consumer's input relative to decisions about</td>
<td>4.00</td>
<td>4.14</td>
</tr>
<tr>
<td>health care and services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicates consumer input to other members of the health care team</td>
<td>3.89</td>
<td>4.17</td>
</tr>
<tr>
<td>Seeks information from appropriate sources on behalf of consumer when</td>
<td>3.87</td>
<td>4.17</td>
</tr>
<tr>
<td>necessary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides care with sensitivity and respect for the diversity of human</td>
<td>4.18</td>
<td>4.17</td>
</tr>
<tr>
<td>experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates caring behaviors toward consumer, significant others, and</td>
<td>4.26</td>
<td>4.28</td>
</tr>
<tr>
<td>groups of people receiving care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assesses presence and extent of physical and emotional comfort</td>
<td>3.98</td>
<td>4.09</td>
</tr>
<tr>
<td>Initiates treatments to relieve pain and suffering in light of consumer</td>
<td>3.95</td>
<td>4.28</td>
</tr>
<tr>
<td>values, preferences, and expressed needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides holistic care that addresses the needs of diverse populations</td>
<td>3.75</td>
<td>4.10</td>
</tr>
<tr>
<td>across the life span</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works collaboratively with health care providers from diverse backgrounds</td>
<td>3.99</td>
<td>4.20</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses systematic approaches in problem solving</td>
<td>3.58</td>
<td>4.02</td>
</tr>
<tr>
<td>Demonstrates purposeful, informed, outcome-oriented thinking</td>
<td>3.84</td>
<td>4.15</td>
</tr>
<tr>
<td>Demonstrates ability to effectively participate in multidisciplinary</td>
<td>3.68</td>
<td>3.97</td>
</tr>
<tr>
<td>teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotes a productive culture by valuing individuals and their</td>
<td>3.74</td>
<td>4.02</td>
</tr>
<tr>
<td>contributions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Models effective communication</td>
<td>3.73</td>
<td>4.07</td>
</tr>
<tr>
<td>Examines different viewpoints</td>
<td>3.69</td>
<td>4.21</td>
</tr>
<tr>
<td>Clarifies biases, inclinations, strengths, and self limitations</td>
<td>3.58</td>
<td>3.95</td>
</tr>
<tr>
<td>Adapts effectively to stressful situations</td>
<td>3.42</td>
<td>3.94</td>
</tr>
<tr>
<td>Acts as a resource for students and support staff</td>
<td>3.86</td>
<td>4.01</td>
</tr>
</tbody>
</table>
**Shift Comparison Report**

Hospital “E”
(RN competency scores evenly divided between day and night shifts)
## Comparison Report

Overall competency scores based on highest level of education

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>Bachelor</th>
<th>Associate</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.71</td>
<td>3.63</td>
<td>2.14%</td>
</tr>
<tr>
<td>Professionalism</td>
<td>3.76</td>
<td>3.64</td>
<td>3.12%</td>
</tr>
<tr>
<td>Teamwork and Collaboration</td>
<td>3.84</td>
<td>3.75</td>
<td>2.23%</td>
</tr>
<tr>
<td>Evidence-Based Practice</td>
<td>3.52</td>
<td>3.39</td>
<td>3.50%</td>
</tr>
<tr>
<td>Patient-Centered Care</td>
<td>3.91</td>
<td>3.82</td>
<td>2.43%</td>
</tr>
<tr>
<td>Leadership</td>
<td>3.70</td>
<td>3.63</td>
<td>1.88%</td>
</tr>
<tr>
<td>Communication</td>
<td>3.83</td>
<td>3.76</td>
<td>1.63%</td>
</tr>
<tr>
<td>Systems-Based Practice</td>
<td>3.67</td>
<td>3.59</td>
<td>2.08%</td>
</tr>
<tr>
<td>Informatics and Technology</td>
<td>3.79</td>
<td>3.71</td>
<td>2.10%</td>
</tr>
<tr>
<td>Safety</td>
<td>3.73</td>
<td>3.71</td>
<td>0.65%</td>
</tr>
<tr>
<td>Quality Improvement</td>
<td>3.43</td>
<td>3.37</td>
<td>1.81%</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>3.64</td>
<td>3.53</td>
<td>2.89%</td>
</tr>
</tbody>
</table>

Bachelor n = 97  
Associate n = 59
State-wide data: Experienced New Hires

Most common Expert Behaviors - “Areas of Strength”

- Maintains privacy and confidentiality of consumer information
  - Informatics and Technology - 60%
- Provides high quality, safe, and effective patient care - Professionalism - 54%
- Provides care with sensitivity and respect for the diversity of human experience
  - Patient-Centered Care - 54%
- Requests assistance when a situation warrants it
  - Teamwork and Collaboration - 48%
- Demonstrates a basic ability to communicate with an older adult, including those who have cognitive, sensory, or literacy barriers - Geriatrics - 46%
State-wide data: New Grads

Most common Expert Behaviors - “Areas of Strength”

- Acts with integrity and consistency - **Teamwork and Collaboration** - 26%
- Effectively uses computer systems in the work setting - **Informatics and Technology** - 26%
- Maintains privacy and confidentiality of consumer information - **Informatics and Technology** - 23%
- Establishes rapport with consumers - **Communication** - 23%
- Requests assistance when a situation warrants it - **Teamwork and Collaboration** - 21%
- Promotes a productive culture by valuing individuals and their contributions - **Leadership** - 20%
OnRole

Questions and Panel Discussion