AACN QSEN Institutes: Expanding Faculty Capacity

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Purpose:

• Describe the national AACN-QSEN Institutes that are designed to enhance nursing faculty’s ability to effectively develop quality and safety competencies among graduates of pre-licensure programs.

• Describe the outcomes of the project
Overview of the Presentation

• QSEN Demographics
• AACN QSEN Institute Overview
• Key Learnings
  • Pre- and Post Survey Data
    – Quantitative and Qualitative Data
• Summary/Recommendations from the Eight Institutes
QSEN Faculty Development Institute
Overall Attendees

Total # of Attendees: 1138
Total # of Schools: 572
Total # of States: 49
Institute Goals

• Faculty will learn (train the trainer):
  – Quality and safety content, as well as innovative techniques for teaching this content to students and other faculty
  – Ways to champion quality and safety content to implement changes in entry-level nursing courses
AACN QSEN Institutes

- Eight regional 2 ½-day faculty development institutes during 2010-2011
- Approximately 150 nurse faculty members attended each institute
- Supported by the Robert Wood Johnson Foundation
Process Approach and Educational Rigor of Curricula Development

Interactive Process

Step 1: Draft Modules: Papers, references, glossary, resources

Step 2: Internal Review by AACN and Authors

Step 3: External Review by Expert Facilitator Panel

Step 4: Refinement of Draft Modules by Authors

Step 5: Copyediting of Modules-Final Draft
QSEN Evaluation

- **Basic metrics**
  - Number of additional faculty trained
  - Number of nursing courses with quality and safety enhanced
  - Number of students who are enrolled in modified nursing courses
  - Number of institutions significantly changing curricula around quality and safety

- **Surveys**
  - Pre survey
  - One year post survey
  - Two Year post survey
<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
<th>Pre Institute Survey</th>
<th>Year 1 Post Institute</th>
<th>Year 2 Post Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Antonio</td>
<td>January 2010</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>April 2010</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>Sept, 2010</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Phoenix</td>
<td>January 2011</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chicago</td>
<td>March, 2011</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Boston</td>
<td>June, 2011</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Seattle</td>
<td>Sept, 2011</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Charleston, SC</td>
<td>November, 2011</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# QSEN Numbers of Responses & Response Rate

<table>
<thead>
<tr>
<th>Schools Completing at least 1 survey</th>
<th>Pre institute data</th>
<th>6-12 month Post survey</th>
<th>17-24 month Post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>561/572 98%</td>
<td>434/572 (76%)</td>
<td>170/312 (55%)</td>
<td>110/238 (46%)</td>
</tr>
</tbody>
</table>
## Quality Improvement Competency

<table>
<thead>
<tr>
<th>Curriculum Elements</th>
<th>Pre Survey</th>
<th>1 year post survey</th>
<th>2 year post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>QI Improvement project</td>
<td>35.0%</td>
<td>50.0%*</td>
<td>53.6%</td>
</tr>
<tr>
<td>Nurse sensitive measures</td>
<td>55.5%</td>
<td>69.9%*</td>
<td>68.0%</td>
</tr>
<tr>
<td>Case studies in at least 2 courses</td>
<td>36.0%</td>
<td>56.7%*</td>
<td>69.1%</td>
</tr>
<tr>
<td>Root cause analysis experience</td>
<td>30.9%</td>
<td>51.0%*</td>
<td>62.7%</td>
</tr>
</tbody>
</table>

* Chi square using McNemar for statistical significance p = .05
Quality Improvement (QI): students do a QI project in a clinical setting using a QI strategy, e.g., Plan, Do, Study, Act

- Leadership/internship/preceptorship
- Simulation
- Case Studies/scenarios
- Course work
- Clinical/conference
- EBP/Quality project
## Safety Competency

<table>
<thead>
<tr>
<th>Curriculum Elements</th>
<th>Pre survey</th>
<th>1 year Post survey</th>
<th>2 year Post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>School policy on student errors</td>
<td>41.5%</td>
<td>44.2%</td>
<td>46.4%</td>
</tr>
<tr>
<td>Simulation for student to identify safety factor and hazards in at least one course</td>
<td>79.3%</td>
<td>90.4%*</td>
<td>96.4%</td>
</tr>
</tbody>
</table>

* Chi square using McNemar for statistical significance p=.05
Patient Safety: Types of root cause analysis in clinical setting

- Medication errors
- Communication errors
- Leadership
- Other: patient-oriented, EBP, transcription errors, never events, clinical failure, failure to rescue, equipment failures, near misses, skin breakdown, suicide, patient injuries, case study (hyperkalemia), graduate practicum, assessment accuracy.
Patient Safety: Simulation to identify safety factors and hazards in at least one course

- The majority of the simulation exercises were an environment set up with multiple hazards/safety risks
- multiple hazards: examples in communication, various clinical errors, falls, restraints, handwashing, physician orders
- Medication/IV error
## Evidence Based Practice

<table>
<thead>
<tr>
<th>Curriculum elements</th>
<th>Pre survey</th>
<th>Year 1 Post survey</th>
<th>Year 2 Post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students validate and select appropriate data (both internal and external evidence) to guide practice</td>
<td>85.5%</td>
<td>87.8%</td>
<td>94.5%</td>
</tr>
<tr>
<td>EBP Content that incorporates patient values in at least one course</td>
<td>76.3%</td>
<td>87.2%*</td>
<td>92.7%</td>
</tr>
<tr>
<td>Exercises in locating evidence specific to clinical practice topics and guidelines</td>
<td>81.3%</td>
<td>86.9%</td>
<td>90.0%</td>
</tr>
</tbody>
</table>

* Chi square using McNemar for statistical significance p=.05
EBP: Assignments include locating evidence reports on clinical practice topics

- The majority of the responses included research activities, review of evidence and critique of research
- EBP project (change project) (Capstone)
- Evaluation of clinical practice guidelines/policy to evidence
- Poster /PPT presentation on EBP
- Other *: care plans with scientific evidence, EBP discussion, EBP paper, journaling, process recording
- PICO
# Teamwork Competency

<table>
<thead>
<tr>
<th>Curriculum Elements</th>
<th>Pre survey</th>
<th>Year 1 Post survey</th>
<th>Year 2 Post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-professional courses included in formal nursing program</td>
<td>23.1%</td>
<td>24.0%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Inter-professional /group oversees integration of QSEN</td>
<td>8.8%</td>
<td>17.3%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Inter-professional assignment or exercise</td>
<td>11.8%</td>
<td>19.6%*</td>
<td>27.3%</td>
</tr>
</tbody>
</table>

* Chi square using McNemar for statistical significance $p = .05$
Teamwork and Collaboration: Inter-professional courses are part of the formal nursing program

- Limited number of organizations had inter-professional activities
- Majority of courses that do include inter-professional activities are community health activities
- Examples: Uninsured, underserved, policy/testimony to elected official, guest speakers across disciplines, communication workshop, family care, theatre students act as patients, clinical activities with medical students, simulation, case studies, shadowing
## Patent Centered Care Competency

<table>
<thead>
<tr>
<th>Curriculum Elements</th>
<th>Presurvey</th>
<th>Year 1 Post survey</th>
<th>Year 2 Post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments addressing cultural competence, health literacy, and generational significance</td>
<td>84.7%</td>
<td>92.3%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Specific content to engage patient/s families in planning or evaluating care</td>
<td>65.7%</td>
<td>71.9%</td>
<td>75.5%</td>
</tr>
</tbody>
</table>

* Chi square using McNemar for statistical significance p=.05
Patient-Centered Care: Specific assignments address concepts of cultural competence, health literacy, and generational preferences

- Types of assignments
  - case studies
  - patient teaching
  - classroom discussion/presentation simulation
  - community projects
# Health Informatics Competency

<table>
<thead>
<tr>
<th>Curriculum Elements</th>
<th>Pre survey</th>
<th>Year 1 Post survey</th>
<th>Year 2 Post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHR incorporated into simulation experiences</td>
<td>36.6%</td>
<td>48.4%*</td>
<td>60.0%</td>
</tr>
<tr>
<td>Students demonstrate use of PDA in real time</td>
<td>24.8%</td>
<td>23.2%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Students collect data through EHR to improve care</td>
<td>58.6%</td>
<td>68.1%*</td>
<td>71.8%</td>
</tr>
</tbody>
</table>

* Chi square using McNemar for statistical significance p=.05
Informatics: Use data gathered through the Electronic Health Record (EHR) to improve patient care

- IT processes to monitor outcomes
  - Use EHR in clinical setting
  - Simulation
  - Other: clinical observation, elective course, QI data, medication compatibility, patient risk assessment, lab
## Overall Program Questions

<table>
<thead>
<tr>
<th>Curriculum Elements</th>
<th>Pre survey</th>
<th>Year 1 Post survey</th>
<th>Year 2 Post survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement about quality or safety in school/program mission or vision statement</td>
<td>36.7%</td>
<td>41.6%</td>
<td>52.8%</td>
</tr>
<tr>
<td>Specific courses have QSEN competencies in learning objectives</td>
<td>49.7%</td>
<td>73.0%*</td>
<td>76.9%</td>
</tr>
<tr>
<td>Updates on QSEN given to faculty</td>
<td>32.3%</td>
<td>83.9%*</td>
<td>74.1%</td>
</tr>
<tr>
<td>Development of specific tools to address QSEN Competencies</td>
<td>17.2%</td>
<td>46.6%*</td>
<td>47.2%</td>
</tr>
<tr>
<td>Faculty/leadership of school /program engage with clinical partners</td>
<td>81.4%</td>
<td>76.1%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Lectures include information related to financial incentives for quality</td>
<td>78.2%</td>
<td>87.9%</td>
<td>89.8%</td>
</tr>
</tbody>
</table>

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Summary of Surveys

1. Survey results from year 1 and Year 2 indicate that faculty have successfully utilized the train-the-trainer method to teach their colleagues the QSEN competencies

2. Comparison of pre-survey data and Year 1 data show that 12/23, 52% of survey questions showed integration of QSEN content at a statistically significant level. (Eliminated #3)

3. All questions showed a positive trend between pre-survey and Year 1 survey except having interprofessional courses

4. Not enough schools yet surveyed of Year 2 post survey results to show statistical significances between Year 1 and Year 2; trend is toward continued integration of QSEN though at a small rate of change between Year 1 and Year 2
Summary of Surveys

5. Less than ~25% of all schools have integrated interprofessional competencies.

6. Less than 50% of schools have integrated
   a. Policy on student error
   b. Interprofessional course
   c. Interprofessional council to integrate QSEN
   d. Interprofessional assignment
   e. Demonstrate use of PDA
   f. Development of specific tools to teach QSEN

7. Continued emphasis on Teamwork, QI, and Informatics is needed