QSENizing the Practice Setting: A Three-Part Presentation, Applying the QSEN Framework to Practice

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Children’s Hospital Colorado
Sigma Theta Tau International Conference
November 10, 2015 - 8:30am to 9:45am
NATIONALLY RANKED

As one of the Best Children’s Hospitals by the *U.S. News and World Report* for more than 20 years

Magnet® Designation Since 2005
Children’s Hospital Colorado

- Delivering pediatric health care since 1908
  - Affiliated with University of Colorado School of Medicine and College of Nursing
- 17 Locations throughout Colorado
  - Serving a 7 state region
- 534 Inpatient Beds
- 2,000 Registered Nurses
  - 90% Bachelors Degree or higher
  - 47% Direct care nurses certified
- 300 APRNs
- Admissions: 14,000
- Outpatient visits: 600,000
1. Describe the integration of Quality Safety Education for Nurses (QSEN) into the practice setting

2. Identify how to use QSEN competencies in redesigning a clinical advancement program

3. Outline the process of integrating knowledge, skills and attitudes into a competency assessment

4. Explain the development of an innovative tool to evaluate EBP knowledge, skills and attitudes of new graduate nurses using QSEN as a foundation
The Framework: Quality & Safety Education for Nurses

- IOM recommendations
- Competency focused
- Identifies 7 domains of practice
  - Patient Centered Care
  - Teamwork & Collaboration
  - EBP
  - Quality Improvement
  - Safety
  - Informatics
  - (Leadership – Children’s Hospital addition)

**Phases of QSEN Development**

**Phase I**  
2005-2007  
- Developed 6 competencies from IOM

**Phase II**  
2007-2009  
- Schools integrated competencies into their programs  
- qsen.org launched

**Phase III**  
2009-2012  
- Continue to integrate QSEN  
- Develop faculty  
- Change certifications, NCLEX, exams

**Phase IV**  
2012-2015  
- Focused on promotion of advanced degrees
Innovation in Practice: A QSEN Framework for Redesigning a Clinical Advancement Program
Steps 1, 2 & 3

1. Garner support from nursing leaders, the Nurse Credential Review Board (NCRB) & HR

2. Involve nurses at all levels in subcommittees to lead the design and process work

3. Complete a literature review & benchmark for current clinical ladders in healthcare
Purpose of a Clinical Ladder

• Advancement opportunities for nurses, while still providing patient care

• Encourage professional development

• Champion best practice in evidence based patient care

• Support CHCO’s quality and safety initiatives
Step 4 & 5

4. Draft the ladder in a categorized, competency-focused framework or “QSENizing” the design

5. Build new registered nurse job descriptions based on the clinical ladder
7 Categories of the Clinical Ladder

**Patient Centered Care** – provision of care, patient education, plan of care, Professional Practice Model (PPM), patient values

**Teamwork & Collaboration** – communicates effectively within team, improves team performance

**EBP** – identified EBP in practice, performs new EBP as new standard, identifies need for new Policy & Procedure

**Quality Improvement** – uses outcome data (patient & unit), quality improvement projects

**Safety** – used Policy & Procedures, bundles, identifies safety risks

**Informatics** – applies technology to prevent error, analyze information for improvement or patient care

**Leadership** – Scope of practice, shared governance, Professional development, precepting, community support
## Clinical Nurse Ladder – Job Essential Functions

<table>
<thead>
<tr>
<th>Patient &amp; Family-Centered Care</th>
<th>CN I</th>
<th>CN II</th>
<th>CN III</th>
<th>CN IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient’s preferences, values, and needs.</td>
<td>Utilizes and documents the nursing process to provide developmentally appropriate, culturally sensitive, evidence-based care. Identifies changes in patient outcomes in the provision of care. Care is guided by the Professional Practice Model in conjunction with preceptor and other clinical resources. Elicits patient values, preferences and expressed needs as part of implementation of care plan, evaluation of care and assessment of patient/family learning needs. Initiates and coordinates individualized care and education for patients/families across the continuum using an interdisciplinary approach.</td>
<td>Delivers patient and family centered care incorporating the nursing process while providing developmentally appropriate, culturally sensitive, evidence-based care. Actively anticipates changes in patient outcomes/ unit needs in the provision of care. Care is guided by the Professional Practice Model throughout the continuum of care. Communicate and advocate patient values, preferences and expressed needs as part of implementation of care plan, evaluation of care and assessment of patient/family learning needs to the interdisciplinary team.</td>
<td>Assesses and evaluates unit delivery of family centered care incorporating the nursing process while providing developmentally appropriate, culturally sensitive, evidence-based care. Role models and coaches patient and family care needs through assessing changes in patient outcomes/ unit needs in the provision of care. Care is guided by the Professional Practice Model throughout the continuum of care. Identifies and works to remove barriers in order to promote communication and advocacy of patient values, preferences and expressed needs as part of implementation of care.</td>
<td>While providing expert family centered care, appraises and evaluates unit / organizational goals to improve delivery of developmentally appropriate, culturally sensitive, evidence-based care in collaboration with organizational leadership. Mentors and leads interdisciplinary team in initiating, evaluating quality data to provide family centered care. Facilitates interdisciplinary care coordination with consideration of the individualized care and education needs for patients/families across the continuum guided by the Professional Practice Model.</td>
</tr>
</tbody>
</table>

Clinical Ladder Final 11/11/14 (NCRB approval 11/11/14)
Family Centered Care-
- CNII- Getting Child Life involved to help child with painful experiences
- CNIII- Helping to coordinate family with Clinical Social Work to get resources

Teamwork and Collaboration-
- CNIV- Example: Teaching asthma education to schools and primary care provider offices

EBP
- Examples: Bundles and Best Practice Alert, Maintaining Oral Glucose Tolerance List for CF patients

Quality
- CNII- Peer reviews
- CNIV- development of Telephone triage guidelines

Safety
- CNII- Med Rec, Learning Readiness Assessment
- CNIV- development of Best Practice Alert like Synagis, Flu shots

Informatics- Practice Act
- CNII- Bar code scanning
- CNIII Recognizes and Advocates for Timeliness of documentation
Gain approval of the new ladder and process through various decision-making committees

Complete a comprehensive market evaluation for compensation practices
Steps 8, 9 & 10

8. Redesign the process for applications and credentialing within the NCRB

9. Build an education plan for rollout

10. Build the infrastructure for the electronic submission process of credentialing through portfolios
Process for Advancing or Maintaining CN IV Level

1. **RN notifies manager of intent to apply for CN IV.** Together, create a plan to demonstrate CN IV essential functions prior to applying.

2. Manager & RN review current performance & outcomes against criteria & determine application date.

3. RN requests SharePoint Portfolio site to build application (unless already has one). Please click here to put in your request. Meanwhile, RN should be preparing documents (CV, Exemplars, Data, Policy, etc).

4. RN completes Portfolio (see Portfolio Index)

5. RN submits Project Tracking Form to Nursing Project Review Board for assistance with project(s) (click here to access project tracking form)

6. Approval received from Nursing Project Review Board

7. RN presents Portfolio to Nursing Leadership Team for approval (seek assistance from NCRB as needed).

8. RN submits Portfolio to NCRB Admin. (click here to submit)

9. RN performs at appropriate level throughout next two years & determines whether to re-credential to maintain or advance level.

10. Present own Portfolio to NCRB (click here to access the PowerPoint Template). Decision made. Letter sent to staff

11. NCRB assigns two reviewers & RN will provide portfolio link to assigned NCRB members

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**Clinical Ladder**  
(1 hr. session)  
- Objectives:  
  - Identify the components of the clinical ladder  
  - Describe the process for clinical ladder application and progression

**Portfolio Workshop**  
(1 hr. session)  
- Objectives:  
  - Describe how to access and build a nursing professional portfolio in SharePoint  
  - Discuss components of the portfolio index

**Portfolio Party**  
(4 hr. session)  
- Objective:  
  - Demonstrate and build a nursing professional portfolio in SharePoint

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Children's Hospital Colorado  
20
Steps 11 & 12

11. Educate leadership and nursing staff on the competency focused clinical ladder

12. Build professional portfolios for over 500 nurses
Education

- Clinical Ladder
  - 16 Sessions
  - 192 Nurses

- Portfolio Workshop
  - 25 Sessions at 5 Sites
  - 346 Nurses

- Portfolio Party
  - 5 Sessions
  - 25 Nurses

- Website Created
- NCRB Member Support
- Various One-on-One sessions
- Sustainability-Future Sessions Quarterly in 2016 & Beyond
Portfolio Goals

Develop a career plan that promotes a life-long commitment to professional nursing

Documentation of growth & development
- What you know & have learned/experienced
- Your plan in moving forward

Tool to guide professional nurses through the clinical ladder at Children’s Hospital Colorado
Portfolio Considerations

- ANA Scope and Standards of Practice: Pediatric Nursing
- Quality Safety Education for Nurses (QSEN) Competencies
- Colorado Nurse Practice Act
- Magnet ® Model Components
- Professional Practice Model at CHCO
- Nursing Code of Ethics
- (CCNE) Standard for Accreditation of Post-Baccalaureate Nurse Residency Programs
- Nursing Annual Requirements
- Clinical Ladder Requirements

Children’s Hospital Colorado 24
<table>
<thead>
<tr>
<th>Portfolio Index</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROFESSIONAL GOALS</strong></td>
</tr>
<tr>
<td>• All QSEN Competencies</td>
</tr>
<tr>
<td><strong>RESUME/CURRICULUM VITAE</strong></td>
</tr>
<tr>
<td>• All QSEN Competencies</td>
</tr>
<tr>
<td><strong>LICENSE/DEGREE/CERTIFICATIONS</strong></td>
</tr>
<tr>
<td>• Leadership</td>
</tr>
<tr>
<td><strong>PROFESSIONAL ORGANIZATION</strong></td>
</tr>
<tr>
<td>• Leadership</td>
</tr>
</tbody>
</table>
Portfolio Index

**SHARED GOVERNANCE**
- Teamwork & Collaboration
- Leadership

**PROFESSIONAL PRACTICE MODEL/MAGNET**
- Safety

**FAMILY CENTERED CARE**
- Safety
- Family Centered Care

**PROFESSIONAL CONTRIBUTIONS & DEVELOPMENT**
- Evidence-Based Practice
- Quality Improvement
- Informatics
Portfolio Index

COMMITMENT TO LEARNING AS A LIFE-LONG LEARNER
- Leadership
- Informatics

SERVICE TO COMMUNITY
- Leadership

AWARDS/HONORS/SCHOLARSHIPS
- All QSEN Competencies

LETTERS OF RECOMMENDATION
- Leadership
### Helpful Documents

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Modified</th>
<th>Modified By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How to Navigate Your Portfolio Site</td>
<td>4/16/2014 8:40 AM</td>
<td>SU Ferguson, Mitch</td>
</tr>
</tbody>
</table>

### My Professional Documents

- **Document Type: 1. PROFESSIONAL GOALS (1)**
- **Document Type: 2. RESUME/CURRICULUM VITAE (2)**
- **Document Type: 3. LICENSE/DEGREE/CERTIFICATIONS (8)**
- **Document Type: 4. PROFESSIONAL ORGANIZATION (4)**
- **Document Type: 5. SHARED GOVERNANCE (2)**
- **Document Type: 6. PROFESSIONAL PRACTICE MODEL/MAGNET (1)**
- **Document Type: 7. CARE AND EDUCATION OF PATIENT/FAMILY (1)**
- **Document Type: 8. PROFESSIONAL CONTRIBUTIONS AND DEVELOPMENT (9)**
- **Document Type: 9. COMMITMENT TO LEARNING AS A LIFE-LONG LEARNER (4)**
- **Document Type: 10. SERVICE TO COMMUNITY (1)**
- **Document Type: 11. AWARDS, HONORS, SCHOLARSHIPS, LETTERS OF APPRECIATION (3)**
- **Document Type: 12. LETTERS OF RECOMMENDATION (3)**
Outcomes

- Increase in CN IV nurses
- Increased manager involvement
- Increase in project alignment & documentation
- New graduate nurse exemplars & goal plan
Strategies to Grow and Sustain a Competency Assessment Model Utilizing the Quality Safety Education (QSEN) for Nurses in the Clinical Setting
“Competency is an expected level of performance that integrates, knowledge, skills, abilities and judgment.”

(ANA, 2008)

“Habitual and judicious use of communication, knowledge, technical skill, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community being served.”

(Epstein, 2002)
Process of Integrating QSEN into Competency

- Competency task force developed
  - February 2011

- Reviewed QSEN criteria
  - April 2011

- Integrated KSA into competency statements
  - May 2011

- Piloted basic competency assessment with new graduate residents
  - August 2011

- Evaluated basic competency assessment
  - November 2011

- Provided education to key stakeholders
  - July 2012

- Implemented competency assessments
  - August 2012

- Developed program specific competency assessments
  - 2012

- Developed unit specific competency assessments
  - 2012-2013

- Develop & implement revision cycle
  - 2014

- Expand tool to interprofessional teams
  - 2015
3 Tiers of Competencies

Tier I
- Basic

Tier II
- Inpatient
- Critical Care
- Emergency
- Ambulatory
- Mental Health

Tier III
- Unit Specific
## Example of previous skills format

<table>
<thead>
<tr>
<th>SKILLS LIST</th>
<th>Not Applicable</th>
<th>Previous Experience / Read P &amp; P</th>
<th>Discussed with Preceptor</th>
<th>Performed Correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugged ETT/trach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPD</td>
<td></td>
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</tr>
<tr>
<td>Diaphragmatic hernia</td>
<td></td>
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</tr>
<tr>
<td>Hypercarbia</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Tachypnea</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Atelectasis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary edema</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Meconium aspiration</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Hypoxia</td>
<td></td>
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<tr>
<td>Hyperoxia</td>
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<tr>
<td>Respiratory acidosis</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Respiratory alkalosis</td>
<td></td>
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<tr>
<td>Pneumothorax</td>
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<tr>
<td>Tracheal decannulation</td>
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<tr>
<td>PPHN</td>
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</tbody>
</table>
Basic Nursing Competency Assessment-Tier I

Children’s Hospital Colorado

Competency is the measurement of knowledge, skills, and attitudes that demonstrate an expected level of performance. Quality safety education for nurses (QSEN) delineates the standard of expected knowledge, skills and attitudes for the professional nurse.

<table>
<thead>
<tr>
<th>Competency Assessment Criteria</th>
<th>Self-Assessment Learner to Complete</th>
<th>Validation of Competency Preceptor to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Needs review/practice</td>
<td>Method of Instruction</td>
</tr>
<tr>
<td></td>
<td>Competent</td>
<td>P = Policy/Procedure Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E = Education Class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C = Computer Based Learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D= Demonstration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V= Verbal discussion</td>
</tr>
</tbody>
</table>

A. Patient/Family Centered Care

1. Assessment
   - Performs physical, psychosocial, spiritual, cultural, pain and learning assessment

2. Identifies immediate patient needs based upon assessment data, developmental level, diagnosis specific priorities in collaboration with family

3. Identifies patient/family communication needs and accommodates for different modes of communication

4. Evaluates outcomes of care and modifies plan of care as appropriate

5. Effectively and efficiently manages patient care assignment

6. Collaborates with patient/family and education plan

B. Teamwork/Collaboration

1. Participates in care coordination and
<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Performs <strong>eyes, ears, nose and throat</strong> assessment and implements interventions to promote positive outcomes</td>
<td></td>
</tr>
<tr>
<td>2. Performs <strong>cardiovascular</strong> assessment and implements interventions to promote positive outcomes</td>
<td>• Demonstrates phlebotomy skills</td>
</tr>
<tr>
<td></td>
<td><strong>Peripheral Line Care</strong></td>
</tr>
<tr>
<td></td>
<td>• Provides peripheral line care including insertion and maintenance</td>
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<tr>
<td></td>
<td>• Calculates and administers IV fluids</td>
</tr>
<tr>
<td></td>
<td><strong>Central line care</strong></td>
</tr>
<tr>
<td></td>
<td>• Provides central line care including access, maintenance and removal</td>
</tr>
<tr>
<td></td>
<td><strong>Performs care of IV extravasations</strong></td>
</tr>
<tr>
<td></td>
<td>• Calculates % and drug fluid risk calculation for extravasation</td>
</tr>
<tr>
<td></td>
<td><strong>Arterial line care</strong></td>
</tr>
<tr>
<td></td>
<td>• Provides care of patient with arterial lines including: calibration, monitoring, troubleshooting, drawing specimens and removal</td>
</tr>
<tr>
<td></td>
<td><strong>Central venous pressure line care</strong></td>
</tr>
<tr>
<td></td>
<td>• Provides care of patient with central venous lines including: calibration, monitoring, troubleshooting, drawing specimens and removal</td>
</tr>
<tr>
<td></td>
<td>• Performs care principles of the patient with a cardiac monitor</td>
</tr>
</tbody>
</table>

**Peripheral Line Care**

- Provides peripheral line care including insertion and maintenance
- Calculates and administers IV fluids
Ownership of the Learner

<table>
<thead>
<tr>
<th>Competency Assessment Criteria</th>
<th>Self-Assessment Learner to Complete</th>
<th>Validation of Competency Preceptor to Complete</th>
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<tbody>
<tr>
<td></td>
<td>Needs review/practice</td>
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</table>

8. Document correct charting, correct patient

In signing this competency assessment, I agree I have been oriented as documented above. I recognize my own limitations, will seek resources when I am unsure of a planned action and agree to perform according to CHCO policy/procedures, Nurse Practice Act and Professional Standards of Practice.

Signature of Employee ___________________________  Employee Number ___________  Date _______________________

<table>
<thead>
<tr>
<th>Preceptor signature</th>
<th>Preceptor Employee number</th>
<th>Preceptor Unit</th>
<th>Date</th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>

In signing this competency assessment, I agree I have been oriented as documented above. I recognize my own limitations, will seek resources when I am unsure of a planned action and agree to perform according to CHCO policy/procedures, Nurse Practice Act and Professional Standards of Practice.
Overall, the competency assessment forms measure nursing competency for newly hired nurses.
Outcomes

- Standardized format
- Enhanced comprehensive assessment tool
- Tier I-III provide a clear method to orient staff to a variety of roles
Interprofessional Expansion

- Respiratory Therapy
- Pharmacy
- Medical Assistant
- Clinical Assistant (CNA)
- Research Assistant
- Mental Health Counselor
- Inpatient Service Specialist
- Surgical Technologist
- Care Coordinator Role
Review/Revision Process

3 Year Cycle

- Professional Development Specialists
- Collaborate with Clinical Nurse Educators
- Stakeholder feedback

Review Criteria

- Current evidence in literature
- Nursing practice
- Regulatory standards and hospital policies
Sustainability

- Preceptor workshops
- New employees upon onboarding
- Presentations at conferences
- Interprofessional teams
- Professional Development Council
How to Excel at Evaluating a New Graduate Nurse Residency Evidence Based Practice Program
The New Graduate Nurse Residency Program is designed to facilitate integration of new graduate nurses in their first professional role and bridge their transition into practice to improve patient safety.
Program Overview

- Recruitment and hiring
- Year long program
- 10 + weeks of 1:1 preceptor
- Provides 34 classes (80 hours) over 12 months
- EBP project required
- Portfolio with exemplars
- Feedback and evaluation
- Mentoring
## Demographics

### Turnover and Retention Data for 2009-2014

<table>
<thead>
<tr>
<th>Department</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>Inpatient</td>
<td>57</td>
<td>31</td>
<td>47</td>
<td>20</td>
<td>44</td>
<td>43</td>
<td>33</td>
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<td>NICU</td>
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<td>11</td>
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<td>9</td>
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<tr>
<td>Critical Care (PICU/CICU)</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>3</td>
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<td>Float</td>
<td>18</td>
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<td>Memorial</td>
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<td>Emergency Dept.</td>
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<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
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<tr>
<td>Number of Residents</td>
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<td>N=32</td>
<td>N=80</td>
<td>N=77</td>
<td>N=68</td>
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<tr>
<td>Turnover</td>
<td>*19</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2 year Turnover %</td>
<td>19.50%</td>
<td>12.70%</td>
<td>9%</td>
<td>3%</td>
<td>5%</td>
<td><strong>7.7%</strong></td>
<td></td>
</tr>
<tr>
<td>Retention Rate</td>
<td>80.5</td>
<td>87.5</td>
<td>91</td>
<td>97</td>
<td>95</td>
<td>92.3</td>
<td></td>
</tr>
</tbody>
</table>

*2009 reflects a 5 year rate
** 1 year turnover
Program Evaluation Plan

- Casey Fink Graduate Nurse Experience Survey
- Class Evaluation
- End-of-year Program Satisfaction Survey
- 2 year Retention Rate
- Mentoring

Gap identified
EBP Program Evaluation
Evaluation of New Graduate Nurses Knowledge of EBP

EPB Evaluation Tools

What did our findings lead to?
Design of the tool

• QSEN Framework
• EBP steps
• Likert Scale 1-4
• 30 question with a comment section
• Developed in secure data collection system
Project Approval

Organizational Review

Nursing Project Review

Pilot
EBP Project Overview

1. Select a Topic
2. Form a Team
3. Evidence Retrieval
4. Level the Evidence
5. Develop a Standard / Pilot a Change
6. Implement Change in Practice
7. Evaluation
8. Dissemination

Theory into practice
Iowa Model
Current practice
Literature review
Plan, implement & evaluate
Presentation

Adapted from Doody & Doody, 2011
Prevalence of Central Line Infections After the Implementation of Alcohol Impregnated Port Protectors

Allison Duchman, RN BSN & Megan Knudson, RN BSN
Mentor: Mary Bolling, RN BSN CCRN, Clinical Nurse Educator

Evaluation/Summary Table

<table>
<thead>
<tr>
<th>Article</th>
<th>Conclusion</th>
<th>Interventions Implemented</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Impact of universal disinfectant cap implementation on central line–associated bloodstream infections, “ ”</td>
<td>The use of alcohol-impregnated caps along with current bundles are associated with a decrease CLABSI rates, decrease of 68 patient hospital days, prevention of one death, and hospital savings of 282,400/yr.</td>
<td>✗</td>
<td>+</td>
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<tr>
<td>2. Impact of alcohol-impregnated port protectors and needless neutral pressure connectors on central line-associated bloodstream infections and contamination of blood cultures in an inpatient oncology unit, “ ”</td>
<td>Significant reduction in CLABSI in CLABSIs and CCBs rates. Rates decreased from 2.3/1,000 central line-days prior to intervention to 0.3/1,000 central line-days post-intervention.</td>
<td>✗</td>
<td>+</td>
</tr>
<tr>
<td>3. Continuous passive disinfection of catheter hubs prevents contamination and bloodstream infection, “ ”</td>
<td>Alcohol-impregnated caps reduce line contamination, organism density, and a CLABSI reduction rate of 20%.</td>
<td>✗</td>
<td>+</td>
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<tr>
<td>4. Beyond the intensive care unit bundle: Implementation of a successful hospital-wide initiative to reduce central line-associated bloodstream infections, “ ”</td>
<td>CLABSI events decreased from 2.3/1,000 central line-days to 0.9/1,000 central line days.</td>
<td>✗</td>
<td>+</td>
</tr>
<tr>
<td>5. Reducing PICU Central Line-Associated Bloodstream Infections: 3-Year Results, “ ”</td>
<td>Decrease in CLABSI rates due to maintenance bundle. No significant reduction in PICU CLABSI rates with the addition of chlorhexidine entry scrub or chlorhexidine-impregnated sponges</td>
<td>✗</td>
<td>+</td>
</tr>
<tr>
<td>6. Up for the Challenge: Eliminating Peripherally Inserted Central Catheter Infections in a Complex Patient Population, “ ”</td>
<td>Decrease in CLABSI prevalence from 1.67/1,000 central line days and 1.21/1,000 following year to 1.09/1,000 central line days post implementation.</td>
<td>✗</td>
<td>+</td>
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</tbody>
</table>

Key: ✗ - Positive - Interventions improved outcome, Decreased CLABSI rates
       ☑ - Equal - Interventions did not benefit or hurt outcome, No effect on CLABSI rates

Conclusion
The use of alcohol-impregnated caps on IV needleless connectors in addition to current central line bundles is associated with a decrease in central line-associated bloodstream infections and hospitalization costs.
## EBP Mogensen Tool

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</thead>
<tbody>
<tr>
<td>1. I can articulate the definition of evidence based practice</td>
<td>Baseline N=35 6-month N=33 1-year N=33</td>
<td>Baseline N=30 6-month N=33 1-year N=33</td>
<td>Baseline N=19 6-month 1-year N=33</td>
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<tr>
<td>16. I can synthesize multiple research studies to determine the clinical applicability</td>
<td>3.42</td>
<td>3.39</td>
<td>3.43</td>
<td>3.39</td>
</tr>
<tr>
<td>17. I can articulate the definition of research</td>
<td>3.1b</td>
<td>3.1b</td>
<td>3.21</td>
<td>3.27</td>
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<tr>
<td>18. I can synthesize multiple research studies to</td>
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<td>21. I regularly use a standard critique form to review research articles</td>
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<td>22. I feel comfortable writing PICO questions</td>
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<td>23. I can define quality improvement</td>
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<tr>
<td>24. I have written a PICO question as part of an EBP project</td>
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<tr>
<td>25. I feel comfortable compiling information together for EBP presentation</td>
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<tr>
<td>26. I can utilize the steps of the Iowa Model to organize my EBP project</td>
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<tr>
<td>27. I value the Iowa Model as a structure and process for EBP</td>
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<tr>
<td>28. I know what an audit cycle is related to EBP and QI</td>
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<tr>
<td>29. Utilizing a mentor enhanced my ability to do an EBP project</td>
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<tr>
<td>30. A component of EBP is dissemination</td>
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</tbody>
</table>
Future Plans for Tool

- Validation of Tool
- Reliability
- Data Analysis
- Program Modification
Conclusion

QSEN Framework

In Practice

- New Graduate Residency
- Preceptor Workshops
- Clinical Orientation
- Competency Assessment
- Clinical Ladder
- Target Zero
- Competency on the Fly
- Outreach Education
- Job Descriptions
- CNE/CME
Interprofessional Scope

- Audiology
- Case Management
- Child Life
- Social Work
- Nutrition
- Nursing
- Medical Interpreters
- Mental Health
- Pharmacy
- Radiology
- Respiratory Research
- Speech & Learning
- Spiritual Care
- Physical Therapy
- Occupational Therapy
- Trainers
- Medical Assistants
- Emergency Medical Technicians
- Unlicensed Assistive Personnel

Children's Hospital Colorado
References


http://www.biomedcentral.com/1472-6920/9/53


Quality and Safety Education for Nurses (QSEN).(2014) http://www.qsen.org


Children’s Hospital Colorado

A world of thanks to our colleagues!
QUESTIONS?