QSEN Basics: The What and Why of Quality and Safety Competencies

Gwen Sherwood, PhD, RN, FAAN
Co-Investigator, QSEN

Professor and Associate Dean for Academic Affairs
The University of North Carolina at Chapel Hill School of Nursing
Vice President Sigma Theta Tau International
gwen.sherwood@unc.edu
Objectives

- Describe driving forces for implementing quality and safety science in health care
- Describe the Institute of Medicine quality competencies impact on redesign
- Describe Quality and Safety Education Project
- Examine leadership strategies for managing change in a culture focused on quality
- Apply quality and safety competencies to curriculum and clinical learning
Reflection: Engaging in Learning

- What do you want from the time we are here together?

- What did you give up to be here?

- What are you willing to invest to achieve your purpose?
Pop Quiz!
1. According to the IOM how many deaths occur each year due to medical errors?

A. 44,000 and 98,000
B. We do not know.
C. 1 million
D. 25,000 – 35,000
2. According to the IOM, what are the leading causes of unexpected deaths in healthcare settings?

A. Cardiac arrest  
B. Stroke  
C. Emboli  
D. Medical errors
3. What percentage of patients experience a serious medical error while hospitalized?

A. 3%
B. 7%
C. 1%
D. 13%
4. Which accounts for the largest number of patient deaths?

A. Breast cancer
B. AIDS
C. Adverse and sentinel events
D. Motor vehicle accidents
5. The root cause of 65% of sentinel events is:

A. Communication
B. Lack of training
C. Provider intention
D. Lack of caring
6. What is the economic cost of medical error annually?

A. $8 billion to 29 billion
B. $1,000,000 - $20,000,000
C. $1 billion to 10 billion
D. $500,000,000 to $800,000,000
7. What is the cost in human terms?

A. Pain and suffering
B. Moral distress and erosion of trust
C. Disengagement
D. All of the above
Evidence: IOM Quality Chasm Series

- To Err Is Human: Building a Safer Health System (2000) (see IOM.gov)
- Crossing the Quality Chasm: A New Health System for the 21st Century (2001)
- Health Professions Education: A Bridge to Quality 2003
- Identifying and Preventing Medication Errors (2006)
Team Huddle: Minute Work

- Working in groups of 2-3 share an observation of a health care error or near miss.

- In 2-3 sentences name the error. What provider roles were involved? What were consequences? What was the role of the patient or family?
Medication administration safety: what are steps nurses can take?

- On average in-patients may experience at least one medication error per day.

- At least 1.5 million preventable adverse drug events occur each year.

- Contributes to the loss of trust in the system.
  - Identifying and Preventing Medication Errors (IOM, Cronenwett et al 2006)
There are some patients whom we cannot help. There are none whom we cannot harm. A. L. Bloomfield
Changing Mindset: Focus on quality improvement.

- Health care lags behind other high performance industries in examining quality from a system perspective.

- With a system perspective errors are analyzed to identify contributing factors to redesign the system to prevent future occurrences.

- A new Mindset: Move focus from individual performance/blame to system design/prevention.
System: Learning from High performance industries

- Complex, intermittently, intensely interactive
- Perform exacting tasks under time pressure
- Few catastrophic failures over several years
- Focus: Where is the next error likely to occur?
Quality, Safety: Enduring Values

- Nurses have new roles as systems respond

- Quality impacts work force

- Nurses with the resources to do work well experience satisfaction in work that contributes to a positive work environment, engagement and retention.
We can’t hope to make lasting change in the ability of health care systems to improve without changes in the way we develop future health professionals. Those changes require faculty and schools to change.

Paul Batalden
Dartmouth College
QSEN Advisory Board
We must bridge new partnerships between practice and education

What are new ways to integrate student learning experiences into clinical settings with a safety mindset?
All health professionals should be educated to deliver patient-centered care as members of interdisciplinary teams, emphasizing evidence-based practice, quality improvement, [safety], and informatics.

Committee on Health Professions Education
Institute of Medicine (2003)
Welcome

Welcome to QSEN, a comprehensive resource for quality and safety education for nurses! Faculty members worldwide are working to help new health professionals gain the knowledge, skills, and attitudes to continuously improve the health care systems in which they work. This website is a place to learn and share ideas about educational strategies that promote quality and safety competency development in nursing.

Faculty Development

Faculty resources on this website include annotated bibliographies and teaching strategies submitted by faculty like you who are attempting to help students develop the knowledge, skills and attitudes essential to the development of quality and safety competencies. Faculty from 15 nursing schools participated in the QSEN Learning Collaborative in Phase II. You can view a list of our pilot schools here.

We invite you to use this website to share with other nursing educators your ideas for improving quality and safety education for nurses. To upload a teaching strategy, please click here.

...To transform nurse identity to include quality and safety as a core part of what they do...

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

University of North Carolina at Chapel Hill Team:
Principal Investigator: Linda Cronenwett, PhD, RN, FAAN
Co-Investigator: Gwen Sherwood, PhD, RN, FAAN
Project Manager: Denise Hirst, MSN, RN

- Funded by the Robert Wood Johnson Foundation
  - 2005-2007 Phase I Pre-licensure Education
  - 2007-2009 Phase II Graduate Education and Pilot School Collaborative
  - 2009-2011 Phase III Faculty Development to Achieve Curriculum Integration (UNC-CH and AACN)
2005 – 2007 QSEN Phase I

- National Expert panel and Advisory Board
- IOM competencies defined with pre-licensure knowledge, skills and attitudes (KSAs) objectives
- Survey and Focus groups of schools and faculty
- Website www.qsen.org with Teaching strategies and annotated bibliography
- Started work on Graduate Competencies

- Embedded in AACN BSN, MSN, DNP Essentials; NLN Competencies; NCSBN Transition to Practice
# National Faculty Core

- Jane Barnsteiner  
  U Pennsylvania
- Lisa Day  
  UC San Francisco
- Joanne Disch  
  U Minnesota
- Carol Durham  
  UNC – Chapel Hill
- Pamela Ironside  
  Indiana U
- Jean Johnson  
  George Washington U
- Pamela Mitchell*  
  U Washington, Seattle
  Phase II: Deborah Ward
- Shirley Moore  
  Case Western Reserve
- Dori Taylor Sullivan  
  Sacred Heart, CT (Duke)
- Judith Warren  
  U Kansas
Advisory Board Members
Organizational Leaders

- Paul Batalden, MD  IHI, ACGME
- Geraldine Bednash  AACN
- Karen Drenkard  AONE, now Magnet
- Leslie Hall, MD  HPEC, ACT
- Polly Johnson  NCSBN
- Maryjoan Ladden  ACT
- Audrey Nelson  ANA Safe Patient Handling
- Joanne Pohl  NONPF
- Elaine Tagliareni  NLN
- Phase II: Jeanne Floyd  ANCC
**Example: Patient-centered Care**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Skills</th>
<th>Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss principles of effective communication</td>
<td>Participate in building consensus or resolving conflict in the context of patient care</td>
<td>Respect patient preferences for degree of active engagement in care process</td>
</tr>
<tr>
<td></td>
<td><em>Integrate principles of effective communication with knowledge of quality and safety competencies</em></td>
<td><em>Provide leadership in building consensus or resolving conflict in the context of patient care</em></td>
</tr>
<tr>
<td></td>
<td><em>Describe process of reflective practice</em></td>
<td><em>Valued shared decision-making with empowered patients and families, even when conflict occurs</em></td>
</tr>
<tr>
<td></td>
<td>**Create or change organizational cultures so that patient and family preferences are assessed and supported</td>
<td><strong>Value cultural humility</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Value the process of reflective practice</strong></td>
<td><strong>Value the process of reflective practice</strong></td>
</tr>
</tbody>
</table>
Would it work? Call for early adopters:

- Completed 15 school pilot collaborative with exemplars posted on web site and expanded teaching strategies
- Delphi study for placement of competencies in nursing education
- Student Evaluation Survey of competencies
- QSEN facilitator panel N = 40
- Continued work with NONPF on graduate competencies
Delphi Study for placement of competencies in the curriculum

(N=18 QSEN experts)

- Implement as curricular threads
- Early curriculum: individual patient
- Later: teams and systems
- Advanced courses: complex concepts
  - Teamwork and collaboration
  - Evidence-based practice
  - Quality improvement
  - Informatics
    - Barton et al, Nov-Dec 2009 *Nursing Outlook*
Student Evaluation Survey (SES)

17 schools ADN, BSN, diploma, students = 575

Need to improve:

- Knowledge for Teamwork and collaboration, Quality improvement
- Attitude for using quality improvement tools, locating evidence reports for clinical practice guidelines, and evaluating the effect of practice changes using QI
- Skills to Consult experts before deviating from EBP protocols, Evaluate the effect of practice changes using quality improvement methods and measures and Use organizational systems for near-miss and error reporting from Hirst & Sullivan, Nov-Dec 2009 Nursing Outlook
Phase III: UNC-CH and AACN

- Faculty Development to Achieve Curriculum Integration
  - 11 regional workshops for train the trainer through AACN
  - National forum 2010, 2011

- 40 expert Facilitators
- Continue VAQS Scholars
- Website Learning Resources: Lewis Blackman Videos, Learning Modules, Teaching strategies
- Textbook integration, publications
To Learn more: QSEN Publications

- Special topic issues:
  - Phase I *Nursing Outlook* May-June 2007
  - Quality in Nursing *Urologic Nursing* Dec 2008
  - Applying QSEN *Journal of Nursing Education* Dec. 2009
  - Book chapters, additions to textbooks
  - Book due early 2012 (Sherwood & Barnsteiner)
  - www.qsen.org
Nurses work redefined

A Quality Culture: “A new way of thinking like a nurse”

- Engages in their work with the patient as the focus
- Encourages inquiry
- Applies evidence based standards and interventions
- Investigates outcomes and critical incidents from a system perspective
- Continually seeks to improve care
Changing education to change practice:

- How do we change traditional ways of educating nurses?
- How do we move outside embedded assumptions?
- How do we engage students?
- How can we rethink nursing fundamentals?
From the Pilot Learning Collaborative: Integration using a variety of pedagogies will yield more effective change

Thread through nursing and interprofessional courses: class, technology, simulation/skills lab, clinical learning
Reflection on what we do to increase self awareness (EQ)

- Conscious, mindful examination of events to increase self awareness
- Promote individual accountability
- Change behavior to improve practice; integrate what we know
- Move novice to expert: “make sense of practice”
## Patient Centered Care:

<table>
<thead>
<tr>
<th>Define:</th>
<th>Expectation:</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>Applies knowledge of patient values and preferences in caring for patient and with others on the care team.</td>
</tr>
<tr>
<td></td>
<td>Includes patient and family as allies in safety</td>
</tr>
</tbody>
</table>
Small groups: Identify 3 words

- When you think of patient centered care, what three words first come to your mind?
- How do these words compare with the KSAs in the competency definition?
Questions for Patient centered care:

- What is the most important thing I can do right now for this patient?

- What are unique cultural or personal influences?

- How can I more effectively communicate with this patient and family?
  - (Day & Smith, 2007).
Teamwork and collaboration:

Define:
Function effectively in nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care

Expectation:
- Use personal strengths to foster effective team functioning (EQ)
- Integrate quality and safety science in communicating across diverse team members
- Include patient and family as members of the health care team
Standardized communications among teams:

- Use TeamSTEPPS for learning team communication: SBAR, CUS, Check-backs, Check-lists for handoffs (AHRQ.gov)

- Interprofessional rounds to discuss patients’ daily care goals,

- Practice Nurse – physician communications to improve informed physician decision-making and team communication (simulation)
Questions for Teamwork:

- What impact do my actions and attitudes have on other members of the team?
- How can I include all members of the health care team in care planning?
- How do I include the patient and family?
**Define:**
Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care

**Expectation:**
- Applies technology to search evidence for best care approaches and clarify decisions.
Base care standards and protocols on scientific evidence

- Apply levels of evidence to care plan

- Assess actual patient care against the standard of care and known best practice

- Formulate a clinical question from a case study for students to write an evidenced based standard.
Questions to guide EBP:

- What questions should I ask about the care I am giving?
- Why did I choose the care plan I am following?
- What is the level of evidence for the care I am providing?
- How can I balance evidenced based care with patient and family preferences?
Quality improvement:

Define
Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems

Expectation:

- Quality improvement integrated into nursing role and identity
- Uses quality tools, evidence, patient preferences, and benchmark data to assess current practice and design continuous quality improvements
Do you know?

- Rapid Cycle Change
- Benchmarks
- Human factors
- Authority gradients
- Root cause analysis
- Trending
- Variance reports
- PDSA
Quality Improvement Questions:

- What tools can I use to measure nursing outcomes?
- How does the care on my unit compare with industry benchmarks and nursing sensitive measures?
- How can I use evidence based practice standards to improve the quality of care provided and narrow the gap between desired care and reality?
### Safety:

<table>
<thead>
<tr>
<th>Define:</th>
<th>Expectation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimize risk of harm to patients and providers through both system effectiveness and individual performance.</td>
<td>Awareness of actions that may put patients at risk and possibility of error.</td>
</tr>
<tr>
<td></td>
<td>Knows system alerts for safety.</td>
</tr>
<tr>
<td></td>
<td>Seeks solutions to workarounds and evaluates short cuts.</td>
</tr>
<tr>
<td></td>
<td>Includes patient and family as safety allies.</td>
</tr>
</tbody>
</table>
New views of Safety Science apply human factors

- More than “5 rights” of medication administration, assessing risks for falls, and other environmental monitoring activities.

- “Just culture” advocates open reporting and learning from adverse events and near misses.

- Root-cause analyses of safety events and near misses conducted and looped back to improve the system.

- Model behaviors that welcome ‘clarifying’ questions when any team member sees the possibility of an error.
Never events: preventable errors (ex. wrong site surgery)

Red Rules apply standards without exception in a particular process (ex. sponge count)

Error reduction strategies:

- Education and training
- Rules and policies
- Checklists and double-check systems
- Standardization and protocols
- Automation and computerization
- Forcing functions and constraints
Questions related to safety:

- Where is the next error likely to occur?
- What are system alerts or safe guards to prevent the next error?
- What safety questions should I ask about work-arounds and short-cuts?
- How do I handle uncertainty about care decisions?
Informatics:

**Define:**
Use information and technology to communicate, manage knowledge, mitigate error, and support decision making

**Expectation:**
Use electronic record systems
Search for and evaluate information sources
Navigate computer decision supports
Evaluate technologies for their potential to cause or mitigate error.
Help design and evaluate relevant products
Questions to improve Informatics

What are examples of technology applications that improve and manage care?

What tools and strategies are available to search for health care information and data?

How do I apply EBP to evaluate web based Information? How do I help patients and families evaluate information?
World Alliance for Patient Safety

- 9 universal patient safety strategies:
  http://www.jointcommissioninternational.org/24946/

1. Confusing drug names that sound/look alike
2. Confirming patient identification
3. Performing correct procedure, correct site
4. Control of concentrated drug solutions
5. Assuring medication accuracy during transitions
Checklist of safety strategies to avoid mistakes (WHO)

6. Avoid catheter and tubing mis-connections
7. Single use injection devices
8. Improved hand hygiene
9. Communication during patient hand-overs

How do we include these precautions in student learning?
<table>
<thead>
<tr>
<th>Human factors in quality and safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload fluctuations</td>
</tr>
<tr>
<td>Interruptions</td>
</tr>
<tr>
<td>Fatigue</td>
</tr>
<tr>
<td>Multi-tasking</td>
</tr>
<tr>
<td>Failure to follow up</td>
</tr>
<tr>
<td>Poor handoffs</td>
</tr>
<tr>
<td>Ineffective communication</td>
</tr>
<tr>
<td>Not following protocol</td>
</tr>
<tr>
<td>Excessive professional courtesy</td>
</tr>
<tr>
<td>Halo effect</td>
</tr>
<tr>
<td>Passenger syndrome</td>
</tr>
<tr>
<td>Hidden agenda</td>
</tr>
<tr>
<td>Complacency</td>
</tr>
<tr>
<td>High-risk phase</td>
</tr>
<tr>
<td>Task (target) fixation</td>
</tr>
</tbody>
</table>
What are ways to include in our curriculum?

- In small groups identify a competency of interest.
- Develop a learning strategy based on selected KSAs
- Identify learner level
Reflective Journals to Guide learning

- Describe what happened
- Examine feelings
- Evaluate positive and negative of the event
- Analyze to determine sense-making
- Ask what else could you have done?
- Set action plan for future occurrences

Briefing, huddles, debriefing

**Briefing: Planning**
- What is the most important thing I can do right now for my patient?
- How can I include the patient and family as partners in the care goals for today?
- Where are safety issues?
- What are the benchmarks and/or evidence for the care I am delivering?

**Debriefing: Improving care**
- When today was I unsure what to do?
- What actions did I take?
- Where did I go for help?
- What were my feelings?
- What were safety risks?
- What can I learn for next time?
Unfolding Case Studies

- Use theory bursts for content
- Outline case and learning objectives
- Develop scenario, characters, setting, clinical situation, symptoms, and details included or omitted such as lab data, physician orders, medications, diet, treatments
- Establish directed questions for students as well as give time for their questions
- What assessments can students contribute?
- How will you evaluate?
Integrate QSEN competencies

- Patient centered care: concern for patient and family and their wishes
- Teamwork and collaboration: interdisciplinary communication, hand-offs, safety huddles
- Evidence based practice: strength of evidence guiding care, choice of interventions, bundles
- Quality Improvement: how does the care given compare with benchmarks?
- Safety: risk awareness, check lists, error recognition and reporting
- Informatics: EHR, search for evidence, decision support, system alerts
If we are to succeed and make health care reform a reality, we need nurses at the forefront of the effort. You are on the front lines. You know better than anyone where our system works and where it does not. You know how we can improve the quality of care and serve patients more effectively and efficiently.

Sibelius, HHS, 2009
Reflection

- Reflect on your reasons for coming to this session.

- What is your “take home” that you will be able to apply to integrate quality and safety in your work?

- What are gaps for continued learning?