QSEN Basics: Using Simulation to Develop QSEN Competencies

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Objectives

1. Example of how to engage learners around the competency of Teamwork and Collaboration.

2. Describe strategies to develop QSEN competencies using simulation and lab experiences.

3. Identify 2 strategies you will implement to develop QSEN competencies.
Simulation defined

a technique used “to replace or amplify real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner”

Structured simulations encourage students to think as opposed to memorize.

“What is essential for nursing educators is helping students make the connections between acquiring and using knowledge. We call this teaching for a sense of salience.”

Why Interprofessional Simulation?

• Allows learners to function as team
  – Taught in silos
  – In practice setting expected to function in teams
  – Allows appreciation of each practitioner’s role

• Apply teamwork skills in scenario to effectively share responsibility for patient care
Teamwork and Collaboration

- High Fidelity Simulation
- Interprofessional teams
  - Nurse
  - Physician
  - Pharmacist
TeamSTEPPS

Team Strategies and Tools to Enhance Performance and Patient Safety

• Developed by the DOD’s Patient Safety Program with the Agency for Healthcare Research and Quality

• A teamwork system designed for health-care professionals:
  • Improve patient safety
  • Improve communication and teamwork skills among health care professionals
Interprofessional Simulations

Schools of Nursing, Medicine & Pharmacy

**Patient-centered care** - through scenarios with human patient simulator and standardized patients

**Teamwork and collaboration** — focus of course

**Evidenced-based practice** — how to find the evidence and to use it

**Quality improvement** — root cause analysis, Just culture

**Safety** — error disclosure using standardized patients, patient/family panel who have experienced a medical error

**Informatics** — use of electronic records to access patient information and document
Simulation Case – Sara Tomlin

- Post-op (appendectomy)
- Hypertension and tachycardia
- Lethargic and decompensating
- Frantic parent (actor)
- Friend Susie (actor)
  - Party activities – ETOH and Ecstasy
- Drug-drug interaction MAOI, MDMA, & Demerol
- Serotonin Syndrome
- Focus
  - Teamwork and Communication
  - Anchoring or premature closure

- Based on Libby Zion
  
Power Gradients

• Who?
• Have knowledge but not confidence in reporting what they know
• Important to overcome hesitancy
• Include all team members in patient care discussion and decision-making – including patient and family
Two-Challenge Rule

Invoked when an initial assertion is ignored...

- It is your *responsibility* to assertively voice your concern at least *two times* to ensure that it has been heard
- The member being challenged must acknowledge
- If the outcome is still not acceptable
  - Take a stronger course of action
  - Use supervisor or chain of command
Please Use CUS Words
but *only* when appropriate!
Birthing Simulations with Neonatal Resuscitation
Nursing & Medical Students

Online TeamSTEPPS training and testing prior to simulation experience

- **Nursing** (3rd or 4th semester in Maternal/Newborn Nursing):
  - Readings on neonatal resuscitation guidelines (NRP)

- **Medicine** (4th year, matched in pediatrics):
  - Complete training in neonatal procedural skills
  - Successfully lead a simulated resuscitation experience and demonstrate procedural skills necessary for the resuscitation
Birthing & Resuscitation Simulation

**Nursing Students’ Roles**
- Assessment & care of laboring women
- Assessment of fetal status per FHM
- Support of woman and family
- Communication with OB MD and Peds/Neo (*TeamSTEPPS®*)
- Assist with vaginal birth
- Assist with initial newborn care
- Collaborate with physicians in care of baby & mom

**Medical Students’ Roles**
- Respond to call for help
- Communication with OB nurse (*TeamSTEPPS®*)
- Assist with vaginal birth
- Assist with initial newborn care
- Direct neonatal resuscitation
- Collaborate with nurses in care of baby & mom
Patient Care Scenarios

- Hemorrhage: placenta previa
  - 25 yo G1PO at 35 weeks
  - Hx of low lying placenta & bleeding episodes
  - Spontaneous vaginal birth
  - Neonate: pale, flaccid

- Precipitous birth
  - 16 yo G2P0 at 37 weeks; negative hx
  - Progresses from 7cm to 10cm in 1 hr; mild variable decelerations
  - Spontaneous vaginal birth
  - Neonate: limp, dusky, no cry
Interprofessional Neonatal Resuscitation

- Students observed by Medicine and Nursing faculty during simulation
- Debriefing facilitated by Nursing and Medicine faculty
- Debriefing included clinical skills but focused on TeamSTEPPS communication and collaboration skills
Read this?!

- Icdnuolt blveieee taht I cluod aulaclty uesdnatnrd waht I was rdgnieg. The phaonmneal pweor of the hmuan mnid aoccdrnig to rscheearch at Cmabrigde Uinervtisy, it deosn’t mtttaer in waht oredr the ltteers in a wrod are, the olny iprmoatnt tihng is taht the frist and lsat ltteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it wouthit a porbelm. Tihs is bcuseae the huamn mnid deos not raed ervery lteter by istlef, but the wrod as a wlohe.

Amzanig huh?
10,000 units/ml
Pharmacology Competency

• Teach nursing content in silos as well
  – Pharmacology
  – Medication administration

• Competency exam students have to apply both within a timed test – focus on:
  – Patient-centered Care
  – Teamwork and Collaboration
  – Evidenced-based Practice
  – Safety (If make medication error in any of the competency exams has to complete variance report)
Community Health Simulation

• Home health nurse
• School health nurse
• Observers
• Case:
  – Failure to thrive infant
  – School age child truancy
  – Pregnant mom – brittle diabetic
  – Domestic violence partner
Leadership Simulations

Fall 2010 (n=62)

• 8 cases [2 cases/50 mins. 15 case/10 debrief + 10 travel]
• One day: morning and afternoon 4 hours each
  • #1 Teamwork/Task Assistance (#11)
  • #2 Situational Awareness/Time Management/Performance Appraisal (#15)
  • #3 Leadership Styles/Prioritization (#16)
  • #4 Communication/2-challenge rule (#84)
  • #5 JUST Culture (#18)
  • #6 Delegation (#13)
  • #7 Lateral violence/Near-miss Med Error (#24)
  • #8 Authority Gradient/2-challenge rule (#44)
Leadership Simulations

Spring 2011 (n=150)

- 4 cases [40 mins case/10 debrief + 10 travel]
- 4 (4-hr sessions)
  - #1 Situational Awareness/Time Management/Performance Appraisal
  - #2 Leadership Styles/Prioritization
  - #3 JUST Culture
  - #4 Lateral violence/Near-miss Med Error
Pediatric & Psych Simulations

- Kenny  HFS - Meningitis 5 yo/ Head Injury 3 yo
- Shaken Baby Syndrome 2-month-old – Manic depressive parent
- Chest trauma 7 yo/ Anxious child & parent
- Blood transfusion reaction /Substance Abuse 15 yo
Ostomy Affective learning

Patient-Centered Care

- Patient preferences
- Coordination and integration of care
- Information, communication and education
- Physical comfort and emotional support
- Reflect on effects on family through integration with case in virtual community *The Neighborhood*
- Discussion of concepts of pain, suffering related to psychosocial issues
Ostomy Affective learning

Teamwork & Collaboration

- Recognize how authority gradients influence discussions around placement of the ostomy stoma
- Include patient in discussion of placement of ostomy
- Describe impact of own communication style on patient when teaching about ostomy
- Identify members of team to best facilitate patient recovery
Ostomy Affective learning  
**Evidence Based Practice**

- Research strategies for skin protection, odor control and bag security and support with evidence
- Differentiate clinical opinion and tradition from research and evidence
Quality Improvement

Just Culture in ACTION

• Injection lab
• Error made . . .
• Walk the Talk

http://www.ihi.org/IHI/Topics/PatientSafety/SafetyGeneral/Literature/WhenThingsGoWrongRespondingtoAdverseEvents.htm
Teaching Box
System Improvement
Observer Guide

• Quietly observe the performance of your colleagues.
• Pay attention to their interactions and capture your thoughts and concerns.
• Contribute these during the DEBRIEFING.
• Provide positive and constructive feedback in a professional manner.
Sample Observer Guide Items

• Did team members interacting with the patient/family introduce themselves?
• Did team members include patient/family in their care, including them as part of the care team? (QSEN patient-centered care)
• What assessments were performed: VS, SpO₂
• Lung/Heart sounds, LOC/Neuro checks. Note what else was done and what was omitted.
• Did team members gather sufficient patient data prior to calling healthcare provider?
Debriefing Goals

• Enhance critical thinking
• Safe place for discussion – Focus on PERFORMANCE not performer
• Promotes collaboration and communication
• Make connections to clinical practice
Post-Simulation Debriefing

- Faculty actively LISTENS as facilitates
- Provide safe environment to express feelings and ask questions
- Use guided reflection with open ended questions
  - Analyze events
  - Explore feelings
- Student response should guide discussion
- Ensure all have chance to share: students in active role, observers, actors, faculty
- Positive reinforcement
Integrating QSEN Competencies

- Small changes
- Revision
- Examine current labs & simulations
- Talk/Think out loud
- QSEN in all
- Highlight QSEN
Pair & Share

Share your strategy

QSEN Competencies Integration

Skills Lab

Sim Lab

Other

Clinical

Class
Prepare Nurses to . . .

- Inquiry
  - Practice based on inquiry
- EBP
  - Uses evidence based standards and interventions
- Think broadly
  - Investigate outcomes and critical incidents from a system perspective
Resources to help you chart the course

TeamSTEPPS® [Team Strategies and Tools to Enhance Performance and Patient Safety] teamwork and communication curriculum developed by the Department of Defense (DoD) in collaboration with the Agency for Healthcare Research and Quality (AHRQ)

http://teamstepps.ahrq.gov/
Resources to help you chart the course

Geriatric Clinical Simulation at the University of North Carolina, Chapel Hill

The purpose of the Center for Geriatric Clinical Simulation is to disseminate innovative, evidence-based clinical simulations involving older adults, focusing on the educational needs of registered nurses, licensed practical nurses and certified nursing assistants. Simulations cover scenarios ranging from acute exacerbations of chronic conditions to sentinel events, such as falls. Select clinical simulations incorporate interdisciplinary content that facilitates communication between nurses and physicians. [http://gerooclinsim.org/](http://gerooclinsim.org/)
Advancing Care Excellence for Seniors (ACES)

ACES is a collaborative effort of the National League for Nursing and the Community College of Philadelphia. It is funded by The John A. Hartford Foundation, The Independence Foundation of Philadelphia, and Laerdal Medical. A website has been created that contains unfolding simulation case studies and teaching strategies related to care of older adults. These may be downloaded free of charge. The site also links to the How To Try This series of assessment tools and videos as well as additional Hartford resources.

www.nln.org/ACES
Resources to help you chart the course

When Things Go Wrong: Responding to Adverse Events

A consensus statement from the Harvard Hospitals that provides a format for error disclosure including emotional support to patients, families and clinicians involved in serious medical errors.

http://www.macoalition.org/documents/respondingToAdverseEvents.pdf
Resources to help you chart the course

The Simulation Innovation Resource Center (SIRC) National League for Nursing

The SIRC is an online e-learning site for nursing faculty to learn about simulation and ways to integrate it into their curriculum. It provides various ways for faculty to engage with experts and peers. [http://sirc.nln.org/](http://sirc.nln.org/)
Resources to help you chart the course

Patient Safety and Quality: An Evidence-Based Handbook for Nurses


Resources to help you chart the course

Evaluation Tools in Simulation
