Leading the Technology Charge: Incorporating in the Clinical Setting

Elizabeth Cerbie Brown MSN, RN
Director of Nursing Education

Jennifer Dwyer MSN, RN BC, CNRN, FNP BC
Education Specialist
Indiana University Health

• Indiana University Health is Indiana’s most comprehensive healthcare system.

• A unique partnership with Indiana University School of Medicine, one of the nation’s leading medical schools, gives patients access to innovative treatments and therapies.

• IU Health is comprised of hospitals, physicians and allied services dedicated to providing preeminent care throughout Indiana and beyond.
Indiana University Health

- 18 hospitals
- Total admissions: 143,219
- Total outpatient visits: 2,244,320
- Total physicians: 3,707
- Total full-time employees: 26,596 (December 2011)

- 8 clinical programs ranked among the top 50 national programs
- 10 specialty programs at Riley Hospital for Children at IU Health ranked among top 30 nationwide
- Six Magnet-designated hospitals
Objectives

Recognize the benefits of incorporating simulation and technology in order to enhance staff professional development

Identify strategies and tools to incorporate simulation and technology in order to enhance staff professional development
Simulation Center at Fairbanks Hall

Opened August 2009

21 simulation rooms

- 11 acute/virtual hospital
- 10 virtual clinic

30,000 square feet

Partnership with IUSM, IUSN and IU Health
Floor Plan

THE SIMULATION CENTER AT FAIRBANKS HALL

Indiana University Health

INDIANA UNIVERSITY SCHOOL OF MEDICINE
SCHOOL OF NURSING
The Journey

• 2009  Aug-Dec  Getting Our Feet Wet
• 2010  Single Discipline Basic Simulations
• 2011  Strategic Goal for IU Health and Advanced Simulations
• 2012  Interprofessional Focus
Research, outcomes & best practices

- Research results with Faculty Advisors
- Self Efficacy data with Safety Simulation
- Safe Medication Administration Simulation
What We Have Learned

• Learners express:
  – Increased comfort with:
    • e-Doc
    • Approaching patients
    • Calling physicians
  – Evaluating safety:
    • In the environment
    • Related to the patient
    • For the nurse
What We Have Learned

• Educators express:
  – Better appreciation of each others’ roles
  – Increased comfort with e-Doc and simulation

• Unit leadership express:
  – Appreciation for our innovative efforts
  – Recognition of increased confidence by the new staff and ability to advocate for the patient
The What and How To's

Create your Story Board

Simulation Story Template

Pre-Simulation Preparation

Simulation Event

Post-Simulation & Debrief/Guided Reflection
What competencies are you trying to achieve?

- Industry-Product Education
- Basic Clinical Skills
- Communication
- Life Long Learning
- Patient Care
- Practice Based Learning
- Problem Solving
- Professionalism
- Self Awareness
- Social - Community Context
- System Based Practice
- Collaboration
- Teamwork
You Can Do Simulation without a BIG Budget
Visuals

- Flowers
- Blanket
- Picture Frame
- Meal Tray
- Translucent dots
A Picture is Worth a 1000 words
Auditory

- Music
- Crying
- Lamaze Breathing
- Vomiting
- Cardiac sounds
- Gun shots

- iPAD
- iPhone
- iPOD
- The list goes on...
Smells & the Yuck Factor

- Ammonia
- Cigarette Ashes
- Hard Boiled Eggs
- Red Velvet Cake
- Oatmeal and Tub Tints
- Modeling Clay
- Moulage
Location

- Empty Patient Room
- Classroom with roll of artificial turf
- Wall Backdrops
- Rolling Headwall
Candy & Containers
It’s Your Turn to Create

Use the tools in your baggy

Combined with a shared table of resources

...create a learning activity
You Can Do Simulation with a Budget
Small or Large
Task Trainers
It’s all about the Environment
People & Things
Realism
Props
## Simulation Spectrum of Options

<table>
<thead>
<tr>
<th>Standardized Patients</th>
<th>Low Fidelity</th>
<th>Task Trainer</th>
<th>Mid Fidelity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avatar</td>
<td>In Situ</td>
<td>Mannequin</td>
<td>Computer Based Gaming</td>
</tr>
<tr>
<td>Basic Simulator</td>
<td>Patient Simulator</td>
<td>Computer Assisted Instruction (CAI)</td>
<td>Virtual Reality</td>
</tr>
<tr>
<td>Blended Simulation</td>
<td>Hybrid Simulation</td>
<td>Standardized Participants</td>
<td>High Fidelity</td>
</tr>
</tbody>
</table>
Evaluation

- Simulation Design Scale (SDS)
- Educational Practices in Simulation Scale (EPSS)
It Never to Early…
The Possibilities are Endless

What will you take away from this session and apply in your setting?
Audience Focus

- Share best practices
- Seek feedback
- Answer queries and questions
Thank You

Elizabeth Cerbie Brown  MSN, RN
Director of Nursing Education
Indiana University Health
Indianapolis, IN
ecerbie@iuhealth.org
317-962-0854

Jennifer Dwyer MSN, RN BC, CNRN, FNP BC
CCRN Alumnus
Education Specialist Central Orientation & Simulation Center
Indiana University Health
Indianapolis, IN
jdwyer@iuhealth.org
317-948-6584