Blueprint for IP Simulation: A Day in the Life of Healthcare Professionals Working in an Emergency Room

June 16, 2016

Kathryn Whitcomb, DNP, RN, CHSE
Ruth Bargainer, MSN, RN, CNE
April Beckling, BSN, RN, CMSRN
Robyn Faz, MSN, RN
Young Lee, PharmD, BCPS
Terran Keidl, BSN, RN
Bill Davis, CHSOS
Donna Paris, MSN, RN, CCRN-k
ANCC

- Continuing Nursing Education

INACSL is an accredited ANCC provider.
ANCC Required Disclosures

• Conflict of interest
  – Kathryn Whitcomb, DNP, RN, CHSE, reports no conflict of interest.
  – Ruth Bargainer, MSN, RN, CNE, reports no conflict of interest.
  – April Beckling, BSN, RN, CMSRN, reports no conflict of interest.
  – Robyn Faz, MSN, RN
  – Young Lee, PharmD, BCPS, reports no conflict of interest.
  – Terran Keidl, BSN, RN, reports no conflict of interest
  – Bill Davis, CHSOS, reports no conflict of interest
  – Donna Paris, MSN, RN, CCRN-K, reports no conflict of interest
  – Julia Greenawalt (INACSL Conference Administrator & Nurse Planner) reports no conflict of interest
  – Leann Horsley (INACSL Lead Nurse Planner) reports no conflict of interest

• Successful completion
  – Attend 90% of session
Objectives

• Define the purpose of the simulation activity
• Identify resources in the participant’s community/educational venue and adapt the design template to the participant’s setting
• Construct and evidence-based scenario for simulation and justify the use of mannequin simulators, standardized patients, or volunteers
• Summarize evaluation strategies that provide valid and reliable data for analyzing the simulation experience
Overview of Trauma Day

• Purpose
• Participants
• Planning
• Scenarios
• Implementation
• Debrief
• Evaluation
Purpose

Defining the purpose
Planning the Simulation

• Who will be involved?
• What is the desired outcome?
• What is your budget?
Identifying resources in your area

• Universities
• Health professions schools
• Area hospitals
• Community affiliates
Scenario Development

• Diagnoses
  – Complexity

• Writing the scenarios
  – Evidence-based practice
  – IP collaboration

• Evaluation of scenarios
  – Content expert(s)
Sample Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>EMT</th>
<th>Triage (4 Rooms)</th>
<th>Green Zone (4 Rooms)</th>
<th>Yellow Zone (7 Rooms)</th>
<th>Red Zone (3 Rooms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800</td>
<td>Broken Neck, COPD/CHF w/CPAP</td>
<td>Asthma, DVT, Heat Exhaustion, Snake bite</td>
<td>Broken Neck (Rm 1), Heat Exhaustion (Rm 2), Snake Bite (Rm 3), DVT (Rm 4)</td>
<td>COPD/CHF w/CPAP (Rm 1)</td>
<td></td>
</tr>
<tr>
<td>0815</td>
<td>Laceration, Migraine, Preg/Preeclampsia</td>
<td>Laceration (Rm 2), Migraine (Rm 3)</td>
<td>Preg/Preeclampsia (Rm 0B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0830</td>
<td>Megacode (Mi)</td>
<td>Strep Throat, Open arm Frx</td>
<td></td>
<td>Megacode (Mi) (Rm 2)</td>
<td></td>
</tr>
<tr>
<td>0845</td>
<td>Ischemic Stroke, Safe Place Baby</td>
<td>Cellulitis/Homeless</td>
<td>Strep Throat (Rm 4), Open arm Frx (Rm 5)</td>
<td>Cellulitis/Homeless (Rm 1), Safe Place Baby (Rm Nursery)</td>
<td>Ischemic Stroke (Rm 3)</td>
</tr>
<tr>
<td>0900</td>
<td>Hemorrhagic Stroke</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0915</td>
<td>SVT/Suicidal Ideation</td>
<td>UTI, Bee Sting/SOB</td>
<td></td>
<td>Hemorrhagic Stroke (Rm 3)</td>
<td></td>
</tr>
<tr>
<td>0930</td>
<td>DKA, Infant Dehydration</td>
<td>Otitis Media/Child Abuse, SANE Case</td>
<td>UTI (Rm 2), Bee sting/SOB (Rm 3)</td>
<td></td>
<td>SVT/Suicidal Ideation (Rm 1)</td>
</tr>
<tr>
<td>1000</td>
<td>Toddler Overdose</td>
<td>Laboring mom</td>
<td>Otitis Media/Abuse, SANE Case (Rm 1)</td>
<td>DKA (Rm 1), Infant Dehydration (Rm Nursery)</td>
<td></td>
</tr>
<tr>
<td>1015</td>
<td></td>
<td></td>
<td></td>
<td>Toddler Overdose (Rm 2), Laboring mom (Room 0B)</td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td></td>
<td></td>
<td></td>
<td>Debrief in Classroom SON-2000</td>
<td></td>
</tr>
</tbody>
</table>
Behind the Scenes

- Fidelity
  - -SPs
  - -Manikins (high-, mid-, low-fidelity)
- Moulage
- Operations and technical design (A/V systems)
The Patient

- **Manikins**
  - High-, mid-, low-fidelity
  - Task trainers
  - Wireless, battery-operated
  - Compressors

- **SPs**
  - Appropriate to situation
  - Alternate role to patient
  - Hybrid
  - Training time
Moulage
Technical Operations

• Are manikins being moved around the building? Do they have a rechargeable battery or wireless capability?
• Do you need a confederate to connect manikin cables or turn on a compressor when the patient “arrives” in the ER?
• Faculty answering phone calls from students needing a doctor, pharmacist, etc.
Audio-visual

- Recording patient rooms
- Overhead paging system into rooms and public areas
- Control room for manikin operator
- Camcorder to record in public and remote areas
- Camera for still pictures
Debriefing
Simulation Evaluation Strategies

• Instruments
  – Consider using pre- and post-surveys
  – Simulation effectiveness tool (SET or SET-M)
• Qualitative statements
• Lessons learned
Questions?
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER™
School of Nursing

Contact Information
ruth.bargainer@ttuhsc.edu
kathryn.whitcomb@ttuhsc.edu
april.beckling@ttuhsc.edu