Interprofessional Simulation Design Template

Date: 

File Name: Forensic SimulationPeds

Scenario overview:
Diagnosis: Patient evaluation following abduction
Patient name: Sophia Bannow
Level of complexity: Complex, interdisciplinary

Disciplines: Nursing Students; Science students

Student Level: Nursing Students, Science Students (3rd year, 4th year)

Expected Simulation Run Time: 20-30 min
Lab time: 60 minutes

Brief summary:

This case presents a 20-month old Hispanic female who just arrived in the Pediatric Emergency Department after being found by a Fairfield University Public Safety Office in the campus dining area, “The Stag.” S(he) transported her to the EGAN School of Nursing and Health Studies after finding her alone. This patient matches the description of the child from the AMBER Alert.

The students should recognize that the child has a laceration on her forehead and a bruise behind her right ear (and that the bruise behind the ear is a concerning finding in this child, highly suspicious of child abuse). They should provide a developmentally appropriate assessment of the patient while maintaining a safe environment. The students are also expected to communicate with the patient and family, involving them in the plan of care and educating them regarding the evaluation, evidence collection, and social work consultation.

Educational Rationale and Need

Injury is the number 1 killer of children ages 1 to 18 years in the United States (CDC, 2017). Approximately four children in the United States die every day because of child abuse and neglect (Do something, 2018). Over 70% of these children are under the age of 3. According to the National Center for Missing and Exploited Children, nearly 2,000 children are reported missing each day in the United States and about a quarter of all of those children are kidnapped by family members (National Center for Missing & Exploited Children, 2018).

This interdisciplinary team is designed to encourage students to assess a child who was found alone and unsupervised for an unknown period of time and intervene with care and evidence collection as appropriate to keep the child safe.
Learning objectives:

· Enhance learner knowledge and confident care of a victim of suspected non-accidental trauma that presents to the hospital for care (Knowledge, Skills)
· Orient learner to the key elements of the interdisciplinary team management of the pediatric patient who is the victim of suspected non-accidental trauma (Knowledge)
· Describe the role of the nurse in functioning as a member of the interdisciplinary team, caring for pediatric patients who are suspected victims of non-accidental trauma and require the collection of forensic evidence. (Attitudes)

Learning objectives for the simulation

<table>
<thead>
<tr>
<th>Nursing student learning objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn how to analyze evidence scientifically.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Non-nursing) science major student learning objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn basic patient care procedures.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall learning objectives for both types of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate confidence in the proper steps to take when encountering a potential victim of a crime in a health care setting.</td>
</tr>
<tr>
<td>Recognize evidence and/or potentially crime-related injury on a person in a health care setting.</td>
</tr>
<tr>
<td>Document evidence and/or potentially crime-related injury on a person in a health care setting.</td>
</tr>
<tr>
<td>Collect and preserve evidence on a person in a health care setting.</td>
</tr>
<tr>
<td>Understand the interdisciplinary nature of forensics</td>
</tr>
<tr>
<td>Teach students from another discipline about topics of expertise.</td>
</tr>
</tbody>
</table>

Nursing Diagnosis

- Ineffective individual/family coping related to unfamiliar hospital environment and recent events
- Impaired skin integrity as evidenced by skin laceration and bruising
- Pain, acute, related to skin laceration and bruising
- Risk for falls due to developmental stage or age
- Risk for trauma related to laceration, bruise and period of time unsupervised
- Interrupted family processes due to hospitalization

NCLEX Test Plan Categories (2016)

Safe and effective care environment

- Management of care
  - Establishing priorities
  - Confidentiality/information security
  - Legal rights and responsibilities

Safety and Infection Control

- Standard precautions

Health promotion and maintenance
- Developmental stages and transitions
- Techniques of physical assessment

**Psychosocial integrity**
- Abuse/neglect
- Coping mechanisms
- Therapeutic communication

**Physiological Integrity**
Basic care and comfort
- Elimination
- Non-pharmacological comfort interventions

**Pharmacological interventions**
- Dosage calculation
- Medication Administration

**Reduction of risk potential**
- Changes/abnormalities in vital signs
- Potential for alterations in body systems

**Physiological adaptations**
- Alternations in body systems

**Additional Learner Materials – Selected—Additional resources are being identified**

Centers for Disease Control (2017). Retrieved November 14, 2019 from
https://www.cdc.gov/nchs/fastats/child-health.htm

Do something.org (2018). Retrieved November 14, 2019, from

https://www.cdc.gov/nchs/fastats/child-health.htm

**Setting:** Pediatric Emergency Department at the Sim Center

<table>
<thead>
<tr>
<th>Today's Date:</th>
<th>Psychomotor Skills Required Prior to Simulation (by discipline)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brief Description of Client:</strong> At approximately 1500 today, Sophia fell asleep sitting in the front seat of the grocery cart as her mother pushed the grocery cart at the Stop and Shop on Route 1</td>
<td>• Fiber evidence collection from simulated patient (FS)</td>
</tr>
</tbody>
</table>
in Fairfield, CT. As her mother made it down the end of the cereal aisle, she realized that she forgot to buy her son, Kevin's favorite fruit snacks, and briefly left Sophia asleep in the cart at the end of the aisle as she walked back to grab the treat for her son. When she returned to the cart, Sophia was not there. Sophia’s mother screamed for help, the store manager immediately locked all of the doors to the store and called 911. Sophia was not found in the store and the Fairfield police activated an AMBER ALERT. At approximately, 1800, a Fairfield University Public Safety Officer found Sophia hiding underneath a table at “The Stag” and brought her to you for an evaluation in the Pediatric Emergency Department of the EGAN School of Nursing and Health Studies.

Proceed with your care of this child, recognizing the typical growth and development parameters and responses for a 20-month-old child and anticipate those for a child who has been separated from her parent. Be prepared to collect forensic evidence from the patient as needed.

<table>
<thead>
<tr>
<th>Name: Sophia Bannow</th>
<th>Gender: Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age: 20 months old</td>
<td>Race: Hispanic</td>
</tr>
<tr>
<td>Weight: 10.7 kg</td>
<td>Height: 82.8 cm (32.5 inches)</td>
</tr>
<tr>
<td>Religion: Catholic</td>
<td>Major Support: Lives at home with both parents (Janis and David), and 6-year-old brother, Kevin. Maternal grandparents live 5 miles away in Bridgeport, CT. Paternal grandparents live in Puerto Rico and typically visit 2-3 times a year but have not been able to since the hurricane.</td>
</tr>
<tr>
<td>Phone: 203-254-41500</td>
<td>Allergies: Allergy to Amoxicillin, Hives</td>
</tr>
<tr>
<td>Immunizations: UTD</td>
<td>Cognitive Activities Required prior to Simulation [i.e. independent reading (R), video review (V), computer simulations (CS), lecture (L)] (By Discipline)</td>
</tr>
<tr>
<td></td>
<td>• Completion of pre-simulation module</td>
</tr>
<tr>
<td></td>
<td>• Participate in lecture by Dr. Harper-Leatherman (Introduction to Forensics) and Dr. Roney (Introduction to Emergency Nursing)</td>
</tr>
</tbody>
</table>

Terminology (concepts) that all disciplines should be familiar with prior to simulation will be provided in a pre-learning modules on Blackboard Learn. Additionally, there will be video footage to introduce the learners to both active learning settings (chemistry lab and simulation center).

- Preparation and following chain of command for evidence collection (FS)
- Obtain and document vital signs (NS)
- Perform and document head-to-toe assessment for a toddler (NS)
- Provide therapeutic communication with child and family members in the room (NS)
<table>
<thead>
<tr>
<th>Attending Physician/Team: Grossman/ GOLD TEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Medical History: Eczema</td>
</tr>
<tr>
<td>History of Present illness: Sophia's whereabouts are undocumented for at least 3 hours this afternoon.</td>
</tr>
<tr>
<td>Social History: : Lives at home with both parents (Janis and David), and 6-year-old brother, Kevin. Maternal grandparents live 5 miles away in Bridgeport, CT. Paternal grandparents live in Puerto Rico and typically visit 2-3 times a year but have not been able to since the hurricane.</td>
</tr>
<tr>
<td>Primary Medical Diagnosis: Forehead laceration</td>
</tr>
<tr>
<td>Surgeries/Procedures &amp; Dates: none</td>
</tr>
<tr>
<td>Problem List: Forehead laceration; patient evaluation (following infant abduction)</td>
</tr>
</tbody>
</table>

**Interprofessional Simulation Learning Objectives**

**Nursing student learning objectives:**
1. Learn how to analyze evidence scientifically.

**Forensic student learning objectives:**
1. Learn patient care procedures and medical realities related to crime.

**Overall learning objectives for both types of students:**
1. Engage with a realistic mock crime scenario and victim using Egan School simulation technology in a way not possible acting out scenes in a classroom or lab.
2. Understand the interdisciplinary and collaborative nature of forensics.
3. Recognize, collect and document evidence on a person in a health care setting. (Nursing students will use this knowledge as professionals and science students will use this knowledge as informed citizens and/or in professions such as law, journalism, etc.)
4. Use the scientific method to analyze data and draw conclusions.
5. Teach students from another discipline about topics of expertise.
Fidelity (choose all that apply to this simulation)

<table>
<thead>
<tr>
<th>Setting/Environment</th>
<th>Medications and Fluids</th>
</tr>
</thead>
<tbody>
<tr>
<td>X ER</td>
<td>• None</td>
</tr>
<tr>
<td>○ Med-Surg</td>
<td></td>
</tr>
<tr>
<td>○ Peds</td>
<td></td>
</tr>
<tr>
<td>○ ICU</td>
<td></td>
</tr>
<tr>
<td>○ OR / PACU</td>
<td></td>
</tr>
<tr>
<td>○ Women’s Center</td>
<td></td>
</tr>
<tr>
<td>○ Behavioral Health</td>
<td></td>
</tr>
<tr>
<td>○ Home Health</td>
<td></td>
</tr>
<tr>
<td>○ Pre-Hospital</td>
<td></td>
</tr>
<tr>
<td>○ Other ____________</td>
<td></td>
</tr>
</tbody>
</table>

Simulator Manikin/s Needed:
- Dress sim baby in patient gown and put on a dark girl wig
- Place laying supine on a hospital bed
- Secure patient ID band with name, date of birth and MRN #
- Have mother or father sitting at bedside

Props:
- Needs to have fibers from “abductor” onto child (provided by Dr. Harper-Leatherman)
- Need evidence collection kit (provided by Dr. Roney)

Equipment attached to manikin:
- Monitor available but students to attach
- ID band
- Allergy band
- Discipline specific equipment: Dr. Harper-Leatherman to provide fiber samples to adhere to manikins

Equipment available in room
- Diapers
- Workstation with simEMR
- Crash cart with airway devices and emergency medications
- Suction
- O2 with NRB

Diagnostics Available
- Labs

Documentation Forms
- Physician Orders
- Admit Orders
- Flowsheet
- Medication Administration Record
- Triage Forms
- Discipline specific documents
- Chain of evidence form

Recommended Mode for Simulation (i.e. manual, programmed, etc.)
Programmed—no vital sign changes

Standardized patients needed
Role: Mother/ Father
Age: Adult
Male/Female: Both
### Roles / Guidelines for Roles
- Primary Nurse
- Secondary Nurse
- Advanced practice registered nurse
- Family Member—Mother or father
- Social worker
- Observer/s
- Recorder
- Physician / Advanced Practice Nurse
- Social Services
- Public safety

### Important Information Related to Roles

#### Significant Lab Values
None

#### Significant Lab Values

#### Physician Orders
- Cardiorespiratory monitoring
- Diet: Pediatric Regular
- Activity: Up ad lib
- Vital signs: Temperature, HR (Apical), Resp Rate, BP, 02 Sat upon admission and q1 hr while in PED
- Forensic evidence collection for Fairfield Police
- One time medication order:
- Code Status: Full code
- Assess LOC q4hr
- Pain assessment: upon admission and q1hr
- Up ad lib

### Student Information Needed Prior to Scenario:
- Has been oriented to simulator
- Understands guidelines /expectations for scenario
- Has accomplished all pre-simulation requirements
- All participants understand their assigned roles
- Has been given time frame expectations
- Other ________________

### Report Students Will Receive Before Simulation
**Student will receive a video SBAR Report. Draft of script is below.**

**S:** I am going to give you SBAR report on a patient, Sophia Bannow, age 20 months, who is in our pediatric emergency department. I am concerned because she was just admitted and I have not had time to do a full head to toe assessment on her.

**B:** At approximately 1500 today, Sophia fell asleep sitting in the front seat of the grocery cart as her mother pushed the grocery cart at the Stop and Shop on Route 1 in Fairfield, CT. As her mother made it down the end of the cereal aisle, she realized that she forgot to buy her son, Kevin’s favorite fruit snacks, and briefly left Sophia asleep in the cart at the end of the aisle as she walked back to grab the treat for her son. When she returned to the cart, Sophia was not there. Sophia’s mother screamed for help, the store manager immediately locked all of the doors to the store and called 911. Sophia was not found in the store and the Fairfield police activated an AMBER ALERT. At approximately, 1800, a Fairfield University Public Safety Officer found Sophia hiding underneath a table at “The Stag” and brought her to you for an evaluation in the
Pediatric Emergency Department of the EGAN School of Nursing and Health Studies.

No past medical history, no meds or allergies. Again, I have not had a chance to assess her—I just triaged her in the room. She is alert and oriented. Parents are on their way.

**A:** I didn’t complete any assessments on her.... just welcomed her and put her in the room and told them you would be in to see them soon.

**R:** I recommend that you will need to see if there is any evidence on physical assessment of child maltreatment or abuse.
References, Evidence-Based Practice Guidelines, Protocols, or Algorithms Used For This Scenario:


Do something.org (2018). Retrieved November 14, 2019, from


description...excerpted from a The NLN Jeffries Simulation Theory, a monograph published by the national league for Nursing, copyright 2015. *Nursing Education Perspectives (National League For Nursing)*, 36(5), 292-293.


Debriefing / Guided Questions for This Simulation
(Remember to identify important concepts or curricular threads that are specific to your program)

1. How did you feel throughout the simulation experience?
2. Describe the outcomes you were able to achieve?
3. Which outcomes were you unable to achieve (if any)?
4. Did you have the knowledge and skills to meet objectives?
5. Were you satisfied with your ability to work through the simulation?
6. To Observer/s: Could the nurses have handled any aspects of the simulation differently?
7. If you were able to complete this scenario again, how could you have handled the situation differently?
8. What did the group do well?
9. What did the team feel was the primary problem or diagnosis?
10. What were the key assessments and interventions?
12. Is there anything else you would like to discuss?

Interprofessional Debriefing/Guided Reflection questions

Below are questions adapted from the IPEC competency domains that can be used according to the objectives of the scenario.

Roles & Responsibilities
- Did you recognize the need for assistance from other disciplines in a timely manner?
- What occurred during the scenario that made you realize you needed assistance from team members from other disciplines?
- How did communication between disciplines support patient care?
- How did the contributions of other disciplines impact the care you provided?
- Talk about how the limitations in skills and knowledge impacted your role in today's simulation.
- What actions will you take to develop your skills and knowledge?

Communication
- Discuss how you interpreted what was said to members of the team, including the patient, about the care being provided.
• Let’s discuss how individuals demonstrated valuing other members’ contributions.

• Let’s discuss team members’ communication during the simulation. Was it clear, timely, sensitive, and instructive?

• How would you characterize your response to feedback from others?

**Teams & Teamwork**

• Discuss how teamwork emerged in the scenario.

• Was leadership evident within the team? Did leadership change during the scenario? Speak to how leadership emerged or could improve.

**Values and Ethics**

• What actions by team members demonstrated trust and value of the diversity and dignity of all team members?

• How were the interests, values and the culture of the patient respected?

• Speak to how team members demonstrated a high degree of honesty, integrity and competence in their own profession?

• Discuss any ethical dilemmas that became apparent during the scenario.