

Simulation Design Template

Course ADN 551

Primary Health Condition PE

Simulation Learning Objectives

Students participating in the Simulated Clinical Experience will:

1. Recognize abnormal assessment findings **(GLO #2)**
2. Implement appropriate interventions using a set of healthcare provider orders **(GLO #2)**
3. Notify physician using the SBAR format **(GLO #2)**
4. Administer IV medications for the client with a respiratory condition **(GLO #2)**

Client Information:

Age: 84 Date of Birth: April 23 Gender: Female Setting: Med/Surg unit

Name: Agnes Eubanks Race/Ethnicity: Caucasian

Weight: 142 lbs Height: 63 inches

Allergies: NKDA

Past Medical History:

History of osteoporosis, hypertension, CHF

Surgeries/Procedures & Dates:

R hemi hip yesterday

Social History (Religion, Support System):

Religion: Not reported

Major Support: none

Other:

Admission Date 2 days ago

Healthcare Provider: Dr. Bonfils

SBAR Report:

Situation:

Ms. Eubanks is an 84-year-old female who underwent a right hemi-hip replacement yesterday. About an hour ago she started complaining of shortness of breath.

Background:

Ms. Eubanks lives at home alone. She fell home 3 days ago and was found lying in her living room the next day by the mail carrier. Ms. Eubanks was transferred to the hospital via ambulance and a fx R hip was noted. She has a history of osteoporosis, hypertension, and CHF

Assessment:

Last set of vitals: T 98.6 (37.1), BP 124/78, P 100, R 28, O2 Sat 91% on room air. Sinus tachycardia. R hip dressing dry and intact. LOP 4/10. Hydrocodone 5mg/APAP 325mg (Vicodin) 1 tab 4 hours ago. Saline lock patent. Chest x-ray negative for infiltrations or congestion.

Recommendation:

X-ray just called to say her VQ scan now was positive for a PE. See orders

Healthcare Provider Orders today

1. Titrate O2 to keep stats greater than 94%
2. CXR for shortness of breath **(done)**
3. VQ scan for shortness of breath **(done)**
4. STAT ABGs, PTT, PT/INR, CBC, D-dimer
5. Start heparin IV per protocol if VQ scan positive

Psychomotor Skills Required Prior to Simulation

Orientation to Mankin

IV Medication Administration

IV Dosage Calculations

Theoretical Concepts Required Prior to Simulation

Simulation Room Set- up:

Setting Acute Care Type of Manikin Used Adult

Props: (available for all simulations – BP cuff, pulse ox, thermometer, glucometer, O2 set-up)

Additional Props:

Initial Manikin Settings (Head of Bed 30 degrees or less):

Vitals	Lungs	Heart	Abdomen	Other
HR: 118 R: 34 BP: 142/90 T: 37.1 (98.8) PO: 84%	CTA	Regular	BS + x 4	PRN: Simulated sweat on forehead, nose and upper lip. PRN: Cyanosis on lips (blue make-up)
Additional Moulage: Dressing to Rt hip Turn O2 on in control room Saline lock (double lumen) in place				

Mock Medications Required:

Hydrocodone/APAP 5/325

Morphine IV 2mg/mL

IV Heparin 25,000 in 250mL ½ NS

IV Heparin 10,000 units/10mL (1000 units/mL)

Ondansetron (Zofran) IV 8mg/mL

Documents Required (indicate what information will need to be handwritten on forms):

✓ Kardex/SBAR Report

✓ Med Sheets

Other documents:

- Orders
- Heparin drip protocol
- Lab sheet with H and H results (or loaded in computer)

Scenario Progression Outline

Phase I

Name: Agnes Eubanks

Age: 84

Date of Birth: April 23

****Turn on Oxygen compressor****

Timing (approximate)	Manikin Actions	Expected Interventions	Comments
Phase 1	<p>Patient “throws” a clot right before students enter room</p> <p>“Help me! I can’t breathe”</p> <p>“Do something! I can’t breathe”!</p> <p>**Adjust O2 sats according to level and device O2 administered to patient**</p> <p style="text-align: right;"><i>*30 min time jump*</i></p>	<p>Rechecks O2 Sat:</p> <p>Orders stat labs - Labs received via phone or overhead (see Lab script)</p> <p>Initiates Heparin protocol:</p> <ul style="list-style-type: none"> • Gives bolus 5200 units = 5.2 mLs • Sets initial rate 1200 units = 12 mL/hr 	<p>*Administer boluses over at least 1 minute*</p>
Phase 2	<p>“I can’t catch my breath!”</p> <p>“They told me you were going to give me something to break up this clot in my lungs”</p> <p>If O2 sat is 94% or greater patient will calm down and start breathing easier</p> <p>I couldn’t catch my breath and they told me I had a clot in my lung” I was breather better, then right before you came in I couldn’t catch my breath again”</p> <p>“I don’t understand why this is happening”.</p> <p style="text-align: right;"><i>*2 hr time jump*</i></p>	<p>Students can “move time” 30 minutes</p> <p>Rechecks PTT – 37</p> <p>Gives bolus (2600 units = 2.6 mLs)</p> <p>Increases rate (1300 units = 13 mL/hr)</p> <p>Recheck Vital signs: If applied O2 via mask and sat >90: 98.8-98-24-128/86</p>	
Phase 3	<p>“Why did they come and draw more blood?”</p> <p>“Is the clot gone now?”</p>	<p>Rechecks PTT:</p> <p>To end scenario: 68</p> <p>To do add’t change: 44</p> <p>Bolus (2600 units = 2.6mL)</p> <p>Rate (1400 units =14mL/h)</p> <p>77: decrease to 1200u = 12mL/h; no bolus</p> <p>92: Hold infusion</p>	

Debriefing Discussion Points:

Scenario Specific:

1. Discuss initial presenting problem
2. Discuss pathophysiology of signs and symptoms
3. Discuss significance of Heparin therapy
(considering using PE I and II articles found in folder as discussion guide)
4. Discuss cause of respiratory arrest
5. The patient is transferred to ICU and placed on a ventilator. What is the prognosis for this patient?

Additional Discussion Points based on Student Performance

This workforce solution is funded by the IHUM Consortium which is 100% financed through a \$15,000,000 grant from the U.S. Department of Labor's Employment & Training Administration.

The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>. 