

CAN Sim

Canadian Alliance of Nurse Educators Using Simulation ©

Respiratory Distress: DVT to PE

Pre-simulation Preparation



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SECTION I: INSTRUCTIONS

The following document is meant to help you prepare for your upcoming simulation learning activity.

It is important that you follow the following instructions to have the best possible learning outcomes from your simulation activity.

Please read and follows these instructions as they are mandatory for this simulation.

Instructions:

- 1) Please read through this document
- 2) Complete the assigned readings as they will help you prepare for your upcoming simulation on respiratory distress.
- 3) Complete the presimulation preparation virtual simulation game *link provided by instructor
- 4) Once you have completed the presimulation preparation, please:
 - a. Please print TWO copies of the rubric¹ on pages 5-7 and bring them with you on week 7 of your lab:
 - i. Please write your name on each copy.
 - ii. Copy #1: Please complete copy #1 at home after you have finished your pre-simulation preparation. Bring your completed rubric with you to the simulation laboratory. Please identify that it is COPY #1.
 - iii. Copy#2: Please complete copy #2 on site right after finishing your debriefing activity. Please identify that it is COPY #2.
 - b. Hand in all of your completed rubrics to your simulation facilitator.

Most importantly, enjoy your learning experience!!

¹ The rubric is meant to be completed by circling the option that best reflects where you currently situate yourself. You can also provide comments when needed.

SECTION 2: SCENARIO OVERVIEW

Scenario Title: Adult Med Surg/Critical Care: Respiratory Distress: DVT to PE

Estimated Scenario Time: 25 min

Debriefing time: 40 min

Target group: 3rd year BNSc nursing students

Core case: Acute respiratory distress secondary to PE

CNO/ CPSI/CIHC Competencies:

CNO: Professional responsibility and accountability; knowledge-based practice: competent application of knowledge

CPSI: Domain 1 #1, Domain 2 #2, Domain 3 #2, Domain 4 #3, Domain 5 #2, Domain 6 #2 & #4

CIHC: role clarification, patient-centered care, interprofessional communication

Best Practice Guidelines:

ICSI Health Care Guideline: Venous Thromboembolism Diagnosis and Treatment

<https://www.icsi.org/asset/sw0pgp/VTE.pdf>

ICSI Health Care Guideline: Diagnosis and Treatment of Chest Pain and Acute Coronary Syndrome (ACS)

<https://www.icsi.org/asset/ydv4b3/ACS-Interactive1112b.pdf>

Brief Summary of Case:

67 year old male patient on an orthopedic unit, post-op day 2 with a DVT in R calf. Heparin protocol was initiated and is infusing well. Patient has a history of a previous anterior myocardial infarction (MI) 12 months ago with placement of 2 stents. V/S have been stable over the night shift with no complaints. Patient is mildly short of breath and complaining of mild chest pain. O2 saturation (sat) is 90% on room air. Patient's condition worsens and is diagnosed with PE.

EVIDENCE BASE / REFERENCES (APA Format)

Arbour, R.B., & Rickeard, D. (2014). Acute respiratory failure. In S.L. Lewis, S.R. Dirksen, M.M. Heitkemper, L. Bucher, I.M. Camera, M.A. Barry,...D. Goodridge (Eds.), *Medical-surgical nursing in Canada: Assessment and management of clinical problems (3rd Canadian Ed.)* (pp. 1990-2003). Toronto: Elsevier Canada.

Dupras, D., Bluhm, J., Felty, C., Hansen, C., Johnson, T., Lim, K.,...Skeik, N. (2013). Health care guideline: Venous thromboembolism diagnosis and treatment. *Institute for Clinical Systems Improvement (ICSI)*, 13, 1-36. Retrieved from: <https://www.icsi.org/asset/sw0pgp/VTE.pdf>

Enlow, M., Shanks, L., Guhde, J., & Perkins, M. (2010). Incorporating interprofessional communication skills (ISBARR) into an undergraduate nursing curriculum. *Nurse Educator*, 35(4), 176-180.

Goldhaber, S.Z., & Fanikos, J. (2004). Prevention of deep vein thrombosis and pulmonary embolism. *Circulation*, 110, e445-e447.

Lapner, S.T., & Kearon, C. (2013). Diagnosis and management of pulmonary embolism. *British Medical Journal*. Retrieved from: <http://www.bmj.com/content/346/bmj.f757.pdf%2Bhtml>

Malone, M.J., & Moyer, A. (2014). Lower respiratory problems: Pulmonary embolism. In S.L. Lewis, S.R. Dirksen, M.M. Heitkemper, L. Bucher, I.M. Camera, M.A. Barry,...D. Goodridge (Eds.), *Medical-surgical nursing in Canada: Assessment and management of clinical problems (3rd Canadian Ed.)* (pp. 700-703). Toronto: Elsevier Canada.

Scruth, E., & Haynes, A. (2014). Cardiovascular disorders: Venous thromboembolism. In L.D. Urden, K.M. Stacy, & M.E. Lough (Eds.), *Critical care nursing: Diagnosis and management (7th Ed.)* (pp. 399-402). St. Louis: Elsevier.

Wipke-Tevis, D.D., Rich, K., & Chauvin, R. (2014). Venous thrombosis. In S.L. Lewis, S.R. Dirksen, M.M. Heitkemper, L. Bucher, I.M. Camera, M.A. Barry,...D. Goodridge (Eds.), *Medical-surgical nursing in Canada: Assessment and management of clinical problems (3rd Canadian Ed.)* (pp. 1022-1031). Toronto: Elsevier Canada.

SECTION 3: CURRICULUM INTEGRATION

A. SCENARIO LEARNING OBJECTIVES		
Do What	With What	For What
Communicate	A critical change in health status using SBAR	To secure the appropriate collaboration to treat the patient's condition.
Prioritize	Interventions using assessment data	To prevent further deterioration of the patient's condition until help arrives.
Identify	Threats to patient safety	To minimize the extent of injury to a postoperative patient experiencing a decline in health status.
Communicate	Using therapeutic principles	To decrease anxiety in the patient during an emergency situation.
Use	Effective documentation tools	To ensure the events of the emergency are appropriately recorded.

B. PRE-SCENARIO LEARNER ACTIVITIES	
Prerequisite Competencies	
Knowledge	Skills/ Attitudes
<input type="checkbox"/> Care of patient with a DVT	<input type="checkbox"/> SBAR communication
<input type="checkbox"/> Pharmacology of heparin, morphine	<input type="checkbox"/> Administration of medication
<input type="checkbox"/> Oxygen therapy	<input type="checkbox"/> Safe oxygen administration
<input type="checkbox"/> Pathophysiology, risk factors & treatment of MI, PE & respiratory failure	<input type="checkbox"/> Communication with acutely ill, anxious patients
<input type="checkbox"/> Principles of teamwork and collaboration	<input type="checkbox"/> Recognizing a change in patient status

C. Learning Outcome Assessment / Rubric (circle the response that applies and comment when necessary)			
Competency (based on “What For”)	Demonstrated attributes align with required competency	Demonstrated attributes need some improvement to align with required competency	Demonstrated attributes need major improvement to align with required competency
Communicate a critical change in health status using SBAR to secure the appropriate collaboration to treat the patient’s condition.	<ul style="list-style-type: none"> Delivered data accurately portrays the critical nature of the patient’s condition Report is effective and results in immediate buy-in Secured collaboration is appropriate for the needs of the patient 	<ul style="list-style-type: none"> Delivered data somewhat accurately portrays the critical nature of the patient’s condition Report is somewhat effective and results in some buy-in Secured collaboration is somewhat appropriate for the needs of the patient 	<ul style="list-style-type: none"> Delivered data does not accurately portray the critical nature of the patient’s condition Report is not effective and results in little-to-no buy-in Secured collaboration is inappropriate for the needs of the patient
Comments			
Prioritize interventions using assessment data for a postoperative patient experiencing a decline in health status to prevent further deterioration of the patient’s condition until help arrives.	<ul style="list-style-type: none"> Actions reflect a thorough understanding of the significance of the abnormal findings Implements appropriate emergency measures Accesses a variety of resources that result in effective management Demonstrates regard for the urgency of the situation 	<ul style="list-style-type: none"> Actions reflect some understanding of the significance of abnormal findings Implements some appropriate emergency measures Accesses resources that result in some effective management Demonstrates some regard for the urgency of the situation 	<ul style="list-style-type: none"> Actions reflect little to no understanding of the significance of the abnormal findings Implements inappropriate emergency measures Accesses resources that do result in effective management Demonstrates little to no regard for the urgency of the situation

Comments			
Identify threats to patient safety to minimize the extent of injury to a postoperative patient experiencing a decline in health status.	<ul style="list-style-type: none"> • Effectively carries out safety checks • Care demonstrates a regard for infection control practices • Demonstrates accountability for minimizing harm 	<ul style="list-style-type: none"> • Carries out some safety checks • Care demonstrates some regard for infection control practices • Demonstrates some accountability for minimizing harm 	<ul style="list-style-type: none"> • Fails to carry out safety checks • Care demonstrates little to no regard for infection control practices • Demonstrates little to no accountability for minimizing harm
Comments			
Communicate using therapeutic principles to decrease anxiety in the patient during an emergency situation.	<ul style="list-style-type: none"> • Uses a caring demeanour, resulting in compliance with care • Interacts with the patient in a way that facilitates open communication • Demonstrates a regard for respecting the patient and their family's right to be informed • Conveys information to patient and family in a way that promotes understanding 	<ul style="list-style-type: none"> • Uses a somewhat caring demeanour, resulting in some compliance with care • Interacts with the patient in a way that facilitates some open communication • Demonstrates some regard for respecting the patient and their family's right to be informed • Conveys information to patient and family in a way that promotes some understanding 	<ul style="list-style-type: none"> • Does not use a caring demeanour, resulting in little to no compliance with care • Interacts with the patient in a way that does not facilitate open communication • Demonstrates little to no regard for respecting the patient and their family's right to be informed • Conveys information to patient and family in a way that does not promote understanding
Comments			

Use effective documentation tools to ensure the events of the emergency are appropriately recorded.	<ul style="list-style-type: none"> • Records details of event in a timely manner • Data is documented so as to accurately represent the sequence of the ensuing events • Documentation follows institutional policy 	<ul style="list-style-type: none"> • Records details of event in a somewhat timely manner • Data is documented so as to somewhat accurately represent the sequence of the ensuing events, however some clarification is needed • Documentation somewhat follows institutional policy 	<ul style="list-style-type: none"> • Does not record details of event in a timely manner • Data is not documented so as to accurately represent the sequence of the ensuing events, and requires extensive clarification • Documentation does not follow institutional policy
Comments			

SECTION 4: PATIENT PROFILE

A. Case summary

67 year old male on an orthopedic unit, post-op day 3 following right total hip replacement (RTHR). Diagnosed post-op day 2 with a deep vein thrombosis (DVT) in his R calf. Heparin protocol was initiated and is infusing well. Patient has a history of a previous anterior myocardial infarction (MI) 12 months ago with placement of 2 stents. V/S have been stable over the night shift with no complaints. Learners are expected to perform a baseline assessment where they should discover the patient is mildly short of breath and complaining of mild chest pain. O2 saturation (sat) is 87% on room air. Upon successful communication from nurses, physician will order a spiral (helical) CT scan and a 12-lead ECG.

B. Patient/Client Profile

Last name:	Fisher	First name:	Maxwell
Gender: M	Age: 67	Ht: 178cm	Wt: 111.5 kg
Spiritual Practice: N/A	Ethnicity: Caucasian		Primary Language spoken: English
1. Past history			
Smoking history of 1PPD X 42 years, quit after MI 12 months ago with placement of 2 stents. Obese. Osteoarthritis of hips and knees.			
Primary Medical DX	Right total hip replacement		

2. Current medications

	Drug	Dose	Route	Frequency
Current	Aspirin	81 mg	P.O.	Daily
	Metoprolol	50 mg	P.O.	BID
	Ramipril	10 mg	P.O.	Daily
	Lipitor	20 mg	P.O.	Daily
	Morphine	10 mg	P.O.	Q4h prn for pain
	Ibuprofen	600 mg	P.O.	Q4H prn for pain
	NTG	1 spray	SL	Q5 minutes x 3 prn for pain

3. Laboratory, Diagnostic Study Results

Na: 136 mmol/L	K: 4.1 mmol/L	Cl: 99 mmol/L	WBC: 9×10^9 /L	BUN: 4.4mmol/l	Cr: 68umol/l
Hgb: 130 g/L	Hct: 52%	Plt: 250×10^9 /L	Glucose:	ABO Blood Type: O+	
PT 10 sec	PTT 35 sec	INR 1.25			

