SIPTEC Simulation Scenario Template

Note: Standard simulation terminology definitions can be accessed at https://www.ssih.org/dictionary.

Section I.	Demographics
Scenario Title	Cystic Fibrosis Exacerbation
Brief Scenario Description (1-2 sentences)	A 24 year old patient with CF was admitted to the hospital with a lung infection. Students must conduct an evaluation and respond appropriately to change in status (drop in SpO2)
Target Learning Group(s) (discipline(s)/IPE, academic level)	IPE Scenario ☐ Yes ☒ No Second or third year physical therapy students
Course/Content Area (e.g., cardiovascular, geriatrics, etc.)	Cardiopulmonary, acute care
Scenario Setting	Hospital floor
Realism/Fidelity (Select most important dimension(s)):	☒ Conceptual/Psychological (i.e., the degree of perceived realism, including psychological factors such as emotions, beliefs, and self-awareness of participants in simulation scenarios *(Healthcare Simulation Dictionary, 2nd ed.)*) ☐ Physical (i.e., the degree to which the simulation looks, sounds, and feels like the actual task *(Healthcare Simulation Dictionary, 2nd ed.)*) ☐ Environmental (i.e., the degree to which the simulated environment (manikin, room, tools, equipment, moulage, and sensory props) replicated reality and appearance of the real environment *(Healthcare Simulation Dictionary, 2nd ed.)*)
Keywords	cystic fibrosis, pulmonary, oxygen saturation
Estimated Time Frame for Single Simulated Encounter (Excluding prebrief and debrief)	20-30 min
Suggested Patient/Learner Ratio	1 patient (role-play by a student), 2 active participants, 3-4 observers

Section II.	Curricular Information/Learning Objectives
Educational Rationale (Broad educational goal, purpose; why this simulation-based learning is important)	Students will conduct an accurate focused assessment for a patient with pulmonary pathology in the acute care setting. Students will maintain patient safety during mobilization and respond appropriately to changes in status throughout the interaction.

Learning Objectives

Provide 2-4 learning objectives for this event. Please ensure these goals are:

- SMART: specific, measurable, action-oriented, realistic, and within a time frame.
- Considerate of the level of the learner
- Aligned with the overall program outcomes
- IPE scenarios must include learning objectives inclusive of all participating professional disciplines.

Consider the following action verbs when constructing learning objectives:

Domain	Pre-Learning*		Simulation Level			
Knowledge	Remember	Understand	Apply	Distinguish	Access	Generate
	Recognize	Interpret	Use	Organize	Summarize	Plan
	Identify	Explain	Solve	Select	Initiate	Prioritize
Psychomotor Skills	Hear	Adjust	Copy	Adjust	Adapt	Design
	Touch	Locate	Discover	Build	Develop	Construct
	See	Prepare	Inject	Mix	Change	Create
Affective	Accept	Cooperate	Explains	Invites	Defends	Qualify
	Reply	Obey	Completes	Proposes	Generalizes	Influence

**Most of the time, objectives that fall in the pre-learning columns can be accomplished in didactic or case-based activities outside of simulation.*

Objective 1	Following this activity, learners will be able to: Interpret critical information on patient status and activity readiness

- Observable actions: Provide a list of steps or actions that may be observed during a simulation to indicate that the learners have met this objective.
  - Identify important information during a chart review and patient assessment
  - Determine communication needs with other team members prior to patient examination.
  -

Objective 2	Following this activity, learners will be able to: Select and perform appropriate examination measures for a patient with pulmonary pathology in the acute care environment

- Observable actions: Provide a list of steps or actions that may be observed during a simulation to indicate that the learners have met this objective.
  - Monitor vital signs at rest and throughout session, including SpO2 and dyspnea scale
  - Perform lung auscultation
  - Perform an activity assessment

Objective 3	Following this activity, learners will be able to: Adapt treatment strategies based on a change in patient status

- Observable actions: Provide a list of steps or actions that may be observed during a simulation to indicate that the learners have met this objective.
  - Modify intensity of physical activity or give rest break in response to a drop in SpO2
  - Instruct the patient in breathing strategies (pursed lip, paced breathing) and/or airway clearance to improve ventilation
  - Titrate oxygen as appropriate

Other:

Section III.	**Prebrief/Orientation/Preparatory Information**

Prebriefing serves as an opportunity to establish a safe learning environment and provide preparatory information related to the simulation-based learning experience. Provide a list of key information to be provided to learners prior to the simulation experience, including, but not limited to related didactic content, learning objectives, activity logistics, simulation fiction contract, confidentiality, orientation to the simulation environment and related equipment, and assessment.

An example of a prebrief checklist is located at https://www.nln.org/docs/default-source/uploadedfiles/professional-development-programs/sirc/pre-briefing-elements.pdf?sfvrsn=726a60d_0. Please use this section to provide an outline of items necessary to be covered in the prebrief for this scenario.

Specific Logistical Information for Prebrief	Didactic content covered before simulation includes pulmonary system pathology, examination and treatment, specifically the PT role in monitoring SpO2 and appropriate response to changes in SpO2. Simulated medical chart provided to all participants 4-5 days prior to the simulation which includes patient demographics, history, medications, lab values, recent pulmonary function testing results, and current vital signs. Pre-brief occurs in 2 parts. The first portion includes all participants/observers in a large group: review SBLE and general structure, confidentiality and fiction contract, how they will be evaluated (low stakes), and introduction to the environment. The second portion occurs after the first and is done with each simulation group individually immediately prior to the simulation experience. This portion includes a review and discussion of their assignment (see below) including a discussion of important information from the chart review and their plan for the session, orientation to the patient room and monitoring equipment, and assignment of roles for the simulation. Each simulation group is required to submit a pre-brief assignment in which they identify pertinent medications, labs and tests and why they are relevant, any precautions or contraindications, prioritized subjective and objective exam data needed, treatment expectations, discharge planning issues and expectations, and identify information that would need to be discussed with other team members. Each

	group lists this information in a table and it is due 1-3 hours prior to the simulation experience. Students have 4-5 days to complete this assignment using the provided medical chart and prior coursework but typically need 2-3 hours. It is given early to allow groups to find adequate time for collaboration. ☒ See attached information. (Information for medical chart)

Section IV.	Scenario Set Up Materials: Equipment and Supporting Objects
Select Setting	☒ **Inpatient (IP)** *(If selected, proceed to section* **IV. A** *below)* ☒ Acute Hospital Based (e.g., ICU, Emergency Room) ☐ IP-Sub Acute (e.g., SNF, ALF, Sub-Acute rehab) ☐ **Outpatient** *(If selected, proceed to section* **IV. B** *below)* ☐ **Community Based** *(If selected, proceed to section* **IV. C** *below)* ☐ **Other:**
What type of manikin(s)/patient(s) is/are needed for this scenario? (Select all that apply)	☐ Adult Manikin ☐ Child Manikin ☐ Infant Manikin ☐ Newborn Manikin ☐ Preemie Manikin ☐ Maternal Delivery Adult Manikin ☐ Task Trainer ☒ Simulated Patient ☐ Other:
Manikin(s)/patient(s) set up considerations:	☐ Gender: ☒ Age: ~24 ☐ Race: ☒ Attire/Clothing: Hospital gown ☐ Moulage: ☐ Voice: ☒ Position (of manikin(s)/patient(s)): Supine in hospital bed ☐ Other: ☐ See attachment for set-up images

Section IV. A | Inpatient (Acute - Sub-Acute - ICU - ER)

Use the code below for each item in the following section that you select:

I = Initial (should be set up at start of simulation)
R = In room and ready for use
A = Available if needed and asked for (not in room)
P = Attached to patient

Monitors

Code		Code		Code		Code		Code	
	☐ Capnograph (CO2 in the bloodstream monitor)		☐ Electrocardiogram (EKG, ECG) ☐ Telemetry (# of Leads):		☐ Extracorporeal Membrane Oxygenation (ECMO)		☐☐ Hemedex (Blood Perfusion Monitor, BPM)		☐☐ Intracranial Pressure (ICP) Monitor
I	☒ Noninvasive Blood Pressure (NIBP) Monitoring		☐ Patient Bedside Monitor	I	☒ Pulse Oximeter (Saturation monitor)		☐ Ventilator		☐ Vital Sign Monitor (e.g., Dynamap)
	☐ Other:								

Lines

Code		Code		Code		Code		Code	
	☐ Arterial Line		☐ Central Venous Pressure	P	☒ Intravenous (IV) Lines (with fluid bags): ☒ Intravenous (IV) Pole		☐ Percutaneously Inserted Central Catheter (PICC) Line		☐ Other:

Feeding

Code		Code		Code	
	☐ Nasogastric (NG) Tube		☐ Percutaneous Endoscopic Gastrostomy (PEG) Tube		☐ Other:

Airway

Code		Code		Code		Code		Code	
	☐ Continuous Positive Airway Pressure (CPAP)		☐ Endotracheal (ET) Tube		☐ Face Mask ☐ Non-Rebreather Mask ☐ Bag Valve Mask	P	☒ Nasal Canula		☐ Suction Catheter (e.g., Yankauer) ☐ Collection unit
I	☒ Supplemental Oxygen – patient on 4L/min via NC at start of simulation, with ability to increase or decrease by 1-2 L/min		☐ Tracheostomy Tube ☐ Cuffed ☐ Uncuffed:		☐ Other:				

Other Patient Equipment									
Code		Code		Code		Code		Code	
	☐ Chest Tube with Collecting Unit		☐ External Ventricular Drain (EVD)		☐ Indwelling Foley Catheter		☐ Sequential Compression Devices (SCD)		☐ Temporary Pacemaker
	☐ Wound Vacuum-Assisted Closure (VAC)		☐ Other:						
Durable Medical Equipment									
Code		Code		Code		Code		Code	
R	☒ Assistive devices ☒ Walker ☐ Standard ☒ Rolling ☐ Other: ☐ Crutches ☐ Type: ☐ Cane ☐ Type: ☒ Other: w/c		☐ Bath Chair	I	☒ Bed ☒ Hospital ☐ Specialized: ☐ Crib ☐ Incubator		☐ Bedside Commode		☐ Patient Lift Specify:
	☐ Portable Oxygen:		☐ Wheelchair ☐ Type:		☐ Other:				
Additional Room Equipment									
Code		Code		Code		Code		Code	
R	☒ Bedside Chair/Recliner:		☐ Code Cart	R	☒ Garbage Receptacle		☐ Overbed Table		☐ Sharps Dispenser
	☐☒ Other: Gowns, gloves, masks (located on cart just outside of the room)								
Patient ID Band(s)									
Code		Code		Code		Code		Code	
I	☒ Allergies: latex		☒ Code Status: Full		☒ DOB:05/20/1998 (year should be adjusted so patient is 24)		☐ Fall Risk:		☒ Name: Jo Murphy
	☐ Simulated ID Number:		☒ Other: Contact/Droplet isolation precautions						
Miscellaneous Items									
Code		Code		Code		Code		Code	
	☐ Cervical Collar		☒ Gait Belt	R	☒ Gloves	R	☒ Gowns		☐ Manual Blood Pressure Cuff
R	☒ Masks		☐ Ophthalmoscope		☐ Otoscope		☐ Restraints:		☐ Splints:
	☐ Thermometer		☐ Thoracic Lumbar		☐ Timer/Stopwatch		☐ Other:		

			Sacral Orthotic (TLSO)				
Comments:							

Section IV. B	Outpatient

Use the code below for each item in the following section that you select:

I = Initial (should be set up at start of simulation)
R = In room and ready for use
A = Available if needed and asked for (not in room)
P = Attached to patient

General Physical Therapy Equipment									
Code		Code		Code		Code		Code	
	☐ Adjustable Height Exercise Steps		☐ Assistive devices ☐ Walker ☐ Standard ☐ Rolling ☐ Crutches ☐ Type: ☐ Cane ☐ Type: ☐ Other:		☐ Bolsters ☐ Wedges ☐ Supports:		☐ Chairs:		☐ Floor Mat
	☐ Linens ☐ Gowns: ☐ Towels: ☐ Sheets: ☐ Pillows: ☐ Pillowcases: ☐ Blankets:		☐ Mat Table		☐ Mirrors:		☐ Mobilization Belts and Devices:		☐ Patient Lift Specify:
	☐ Rolling Stools:		☐ Step Stools:		☐ Treatment Table ☐ Wooden Plinth ☐ High-Low Adjustable		☐ Other:		
Devices for Tests and Measures									
Code		Code		Code		Code		Code	
	☐ Blood Pressure Cuff		☐ Force Plate Assessment		☐ Goniometers		☐ Grip Dynamometer		☐ Inclinometer
	☐ Isokinetic Testing		☐ Manual Muscle Testing Dynamometer		☐ Monofilament Sensation Testing		☐ Neurological Testing Instruments		☐ Reflex Hammer
	☐ Scoliometer		☐ Sit and Reach Test Box		☐ Stethoscope		☐ Tape Measurer		☐ Thermometer

	☐ Other:								
Modalities									
Code		Code		Code		Code		Code	
	☐ First Aid Kits		☐ Hot Packs		☐ Ice Packs ☐ Ice Massage Cups		☐ Iontophoresis Unit		☐ Multiple Mode Electrical Stimulator (MMES) ☐ Electrodes
	☐ Paraffin Bath		☐ Soft Tissue Mobilization Cream		☐ Traction Unit Specify:		☐ Ultrasound Device and Gel		☐ Vasopneumatic Compression Device
	☐ Wound Care Supplies		☐ Other:						
Educational Materials									
Code		Code		Code					
	☐ Anatomical Model:		☐ Posters:		☐ Other:				
Fitness / Exercise Equipment									
Code		Code		Code		Code		Code	
	☐ Adjustable Height Pulleys		☐ Alter-G Anti-Gravity Treadmill		☐ Balance Boards		☐ Blood Flow Restriction Bands		☐ Body Weight Support System
	☐ Child-Sized Bicycle ☐ Training Wheels		☐ Cube Chairs		☐ Cuff Weights:		☐ Dumbbells:		☐ Medicine Balls
	☐ Multi-Purpose, Multi-Joint, Adjustable Resistive Machine		☐ Parallel Bars		☐ Pilates Reformer		☐ Plyometric Equipment		☐ Putty
	☐ Reciprocal Pulley		☐ Resistive Tubing/ Bands		☐ Scooter (2 and 3-Wheeled)		☐ Scooter Boards with Handles		☐ Supine Shuttle-Style Leg Press Machine
	☐ Toys:		☐ Trampoline		☐ Treadmill		☐ Tricycle		☐ Upper Body Ergometer
	☐ Upright /Recumbent Bike		☐ Various Sports Performance Equipment (e.g., rebounder, agility ladder, specific ball, etc.):		☐ Wall Bars		☐ Other:		
Miscellaneous Items									
Code		Code		Code		Code		Code	

	☐ Automated External Defibrillator (AED)		☐ Gait Belt		☐ Narcan		☐ Orthotics/Splinting Materials:		☐ Taping Supplies
	☐ Timer/Stopwatch		☐ Other:						
Comments:									

Section IV. C Community-Based Settings

Use the code below for each item in the following section that you select:

I = Initial (should be set up at start of simulation)
R = In room and ready for use
A = Available if needed and asked for (not in room)
P = Attached to patient

Code	Home Setting	Code	School-Based Setting	Code	Sports Setting	Code	Other Setting
	Room/Furniture Setup:		Describe Area / Room Setup:		Specify:		Describe Room Setup:
	☐ Entrance:		☐ Bathroom ☐ Cafeteria ☐ Classroom ☐ Outdoor Field		☐ Automated External Defibrillator (AED)		
	☐ Stairs:		☐ Physical Education		☐ Narcan		
	☐ Other:		☐ Playground		☐ Sport Specific Equipment:		
			☐ Other School Environment (e.g., transportation/bus ramp):		☐ Other:		
Comments:							

Section V.	Clinical Context
Case Summary (for facilitators): Brief summary of case progression and major events	The patient is a 24 year old with CF exacerbation and bacterial infection of the lungs. The patient is independent with bed mobility and requires supervision with transfers and ambulation. SpO2 decreases below 90% on 4 L/min oxygen with minimal activity (standing, walking within room). SpO2 will improve with positioning, cues for breathing strategies and airway clearance. Will also improve with rest but more slowly. The patient wants to get walking, is not concerned about the decrease in SpO2
Case Stem (for learners): To be provided to learners immediately prior to entering the simulation room	See information from medical chart
Patient Information	● Name: Jo Murphy ● Age/DOB: 24; 5/20/97 ● Gender: M/F ● Height: ● Weight: ● Chief Complaint: shortness of breath ● History of Present Illness/Symptoms: Patient noticed increased mucus production over past 2 weeks which became greenish brown and thicker, difficult to expectorate; also developed general malaise, decreased appetite, increased dyspnea and leg fatigue with walking. Initially started on inhaled antibiotic (Tobramycin) as an outpatient and increased frequency of airway clearance. However dyspnea continued to worsen, with episodes of hemoptysis and development of fever. Admitted to hospital 5 days ago with SpO2 87% on room air. Sputum cultures positive for *Pseudomonas aeruginosa* and *methicillin-resistance Staphylococcus aureus*. ● Primary Medical Diagnosis: CF exacerbation due to bacterial infection of the lungs ● Status/Attentiveness: Stable condition; good health literacy and familiarity with condition ● Patient Affect/Behavior: Wants to get back to school ● Past Medical History: Cystic fibrosis diagnosed during newborn screening, 2 previous hospitalizations for CF exacerbations 5 and 7 years ago ● Family Medical History: ● Social History: The patient is a college student, in grad school and needs to be able to walk across campus ● Home Environment: Lives with roommate in apartment with stairs ● Prior Level of Function: Independent; performs airway clearance with Vest and Acapella devices 2x/day ● Review of Systems: ● Medications (Medicine, Dosage, Reason for Medication): ○ D5 0.45 NS 40 ml/hr IV continuous

	○ Ceftazidime 2 mg IV every 24 hours - antibiotic ○ Pulmozyme 2.5 mg neb daily - mucolytic ○ Combivent 2 puffs inhaled every 6 hours - bronchodilator ○ Tobramycin 300 mg neb every 12 hours - antibiotic ○ Prednisolone 60 mg po daily - steroid ○ Pancrelipase 35 KU po with meals – enzymes for digestion ○ Omeprazole 20 mg po daily – proton-pump inhibitor (for heartburn) ○ Tylenol 650 mg po every 4 hours prn fever or mild pain ● Allergies: Latex ● Other: Contact/droplet precautions
	●

Patient Electronic Medical Record (EMR) Data							
Labs							
N/A: ☐							
Complete Blood Count (CBC)							
WBC	15.2	Platelets	325	Hgb	20	Hct	56
Basic Metabolic Panel (BMP)							
Glucose	202	Ca		Na		K	
Bicarb		Cl		BUN		Cr	
PO4		Mg		T3		T4	
TSH							
Liver Function/Hepatic Panel							
Serum Albumin		Serum Prealbumin		Serum Bilirubin		Ammonia (NH3)	
Lipid Panel							
HDL		LDL		Triglycerides		Total Cholesterol	
Bleeding Ratio/Viscosity							

INR		APTT		Prothrombin Time		
Cardiovascular-Specific Labs						
BNP		CK		Troponin		

Tests Included in EMR					
EKG	☐ Yes ☒ No	EEG	☐ Yes ☐ No	X-Rays	☒ Yes ☐ No
EMG	☐ Yes ☐ No	CT	☐ Yes ☐ No	MRI	☐ Yes ☐ No
Other	Pulmonary function tests showing FVC 60% predicted; FEV1 43% predicted; FEV1/FVC 70% PEF 52%; TLC 110%; FRC 122%; IC 64% (see medical chart info)				

Baseline Presentation											
Vitals											
N/A: ☐											
Baseline vitals displayed at start:	☒ Yes ☐ No	HR	86	BP	122/82	RR	20	Temp.	98.9	SpO2	94% on 4L/min

Embedded Participant Script(s)		
One row for each embedded participant:		
Role	**Name**	**Script/Notes** (consider when and how they will participate in the scenario)
Rehab tech		This person is a second PT student role-playing a rehab tech and is available to support the PT with line management, w/c follow, or other tasks as directed by the PT within their scope

Patient/Standardized Patient (SP) Scripting and Cues

Brief Case Summary for Patient:

You are a 24 year old with good health literacy and insight into your medical condition. You are able to manage independently while away from home at grad school. You are worried about missing so much school and want to get moving so you can get out of the hospital, however you become short of breath with minimal activity and SpO2 decreases. You are not worried about it and want to keep going with mobility and exercise, need cues from the PT to slow/stop activity when SpO2 drops. You tend to adopt rapid, shallow breathing pattern with exercise

Opening Line:
(What do you want the patient to say at the beginning of the experience?)

Challenge Question(s):
(Question patient is to ask the learner during the experience + answer to the question)

Q:Can I walk in the halls after you leave?
A: Need to progress activity slowly due to pulmonary infection and dyspnea, also need to monitor SpO2 closely and take supplemental oxygen, so at this time need PT, RT, RN to accompany

Other:

Patient/SP Scripting and Cues	
Identify questions the learner may ask during the experience that require a specific answer and provide the answer to the question. For all other questions, the patient can "use their own" information.	
Prompts	**Scripted Questions and Corresponding Responses**
Patient responses to anticipated interview questions or other triggers:	Q: Do you perform airway clearance at home? A: Typically perform independently 2x/day using the Vest and an Acapella device Q: Rate your breathlessness A: At rest can be 0-1; with activity should be 4-5/10; Can use any high number if not explained well or shown a copy of the dyspnea scale
Questions the patient MUST ask:	Q: Can I walk in the halls after you leave? A: Need to progress activity slowly due to pulmonary infection and dyspnea, also need to monitor SpO2 closely and take supplemental oxygen, so at this time need PT, RT, RN to accompany
Questions the patient will ask if given the opportunity:	When can I leave the hospital?

Information that should be shared or withheld by the patient:	
Patient goals:	The patient would like to get out of the hospital and return to school; currently in graduate school and is worried about missing so much

Patient Presentation		
Use this section to document how the SP should present physically in response to screening/tests and measures.		
Body System/Skill	**Involved**	**Details**
Neurological	☐ Yes ☒ No	Good standing balance
Respiratory	☒ Yes ☐ No	Rapid, shallow breathing pattern initially, and wheezes until gets meds from nursing or airway clearance performed. Fatigues with minimal exertion (walking within the room, <15 feet), reports dyspnea 4-5/10 and SpO2 decreases to 85-89% during walking within the room or with prolonged activity lasting >15 seconds if the student performs any exercises (such as seated or standing marching, squats or repeated sit to stand transfers).
Integumentary	☐ Yes ☒ No	
Cardiovascular	☒ Yes ☐ No	Fatigues quickly with activity (see above). SpO2 decreases to 85-89% on 4L/min oxygen via NC and HR increases 20-30 bpm with walking within room <15 feet or with prolonged activity/exercise > 15 sec
Musculoskeletal	☐ Yes ☒ No	Normal strength of upper and lower extremities
Affect/Behavior/Cognition	☐ Yes ☒ No	A&Ox3
Communication	☐ Yes ☒ No	
Functional Ability	☐ Yes ☒ No	

Section VI. Scenario Facilitation

Scenario States, Trigger Points, and Critical Actions

Critical actions are the actions to be taken by learners to meet the learning objectives of the scenario. These are the skills you would like the learners to perform during the simulation experience to meet the learning objectives. These skills may range from performing a comprehensive patient history to complex medical procedures. Based on the complexity of skill to be performed, there may be multiple ***observed behaviors or performance measures*** associated with the skill. These behaviors should be directly observable or measurable during the experience and may

include reflection during the debriefing or following the experience (post-experience surveys or reflections). Performance measures should be evidence-based.

Patient cues or triggers should be linked to critical actions and performance measures. They are used to direct learners towards the intended objectives. Cues can be conveyed to learners verbally (responses provided by the patient, provider, or embedded participant), visually (changes in vital signs displayed on a monitor), or through additional data (new lab or imaging results).

There may be multiple ***management pathways*** for learners to meet the learning objectives associated with the provision of patient care during the simulation scenario. These pathways may vary based on the critical reasoning and performance of the learner. This section allows for "if…, then…" scenario drivers to be added within this column to direct the facilitator to specific phrases within the scenario flow. Also, the complexity of the patient presentation may allow for more than one examination and treatment option that would benefit the patient. The scenario should be developed to accommodate these acceptable variations in practice while maintaining consistency and standardization to increase the scenario repeatability.

Scenario Flow (Approximate Timing)	**Patient Status**	**Action(s): Cue(s), Trigger(s), Response(s)**	**Expected Critical Action(s)/Intervention(s)/Response(s)**	**Observed Behavior(s) / Performance Measure(s)**	**Management Pathway(s)**	**Learning Objectives**
First 5 min	Low SpO2 (90% upon entering room)	Role member providing cue: Patient Cue: Low SpO2 on monitor, nasal cannula on incorrectly	Learners are expected to: Note low oxygen, communicate with RN (played by PT faculty member), instruct the patient in appropriate breathing strategies	Fix nasal cannula, Ask about last breathing treatment/meds, Instruct patient in breathing and/or airway clearance		1, 2, 3
Next 10 min	Stable vitals	Role member providing cue: Patient Cue: normal breathing, no SOB if sitting at rest; minimal changes in HR and BP on monitor if sitting at rest	Learners are expected to: Gather relevant subjective information, screen patient to determine if safe for mobility	Asks appropriate questions, performs lung auscultation, assesses strength, balance, function Monitors HR, BP, SpO2, RR, Educates on dyspnea scale	Hillegass textbook	2
Next 5-10 min	Low SpO2 during standing & walking (85-89%)	Role member providing cue: Patient Cue: SpO2 decreases to 85-89% on monitor and dyspnea score increases to 4-5/10 with prolonged seated or standing activities (>15 seconds) or with ambulation within the room (<15 feet).	Learners are expected to: Perform activity evaluation Respond appropriately to change in status	Notes low oxygen during standing and walking and modifies treatment, provides instruction on appropriate breathing strategies again, titrates oxygen only after above have been tried	Hillegass textbook	2, 3

		Role member providing cue: Cue:	Learners are expected to:			
		Role member providing cue: Cue:	Learners are expected to:			

Section VII. Debriefing

Debriefing Objectives: Review summary of experience, summarize the case, what were the main issues dealt with?

"The purpose of this debrief is to _____. Everyone's participation is welcome and encouraged."
Overall reaction to experience: *"How did that feel?"*
Share learning objectives with the learners.

Debriefing is a critical part of the simulation learning process; however, it is not standardized how the debrief is to be delivered based on several variables, including but not limited to the debriefer's(s') style, level and experience of the learners, and the debriefing strategy. Below are several resources that share best practices on a variety of debriefing models.

Resources for Debriefing:

- Healthcare Simulation Standards of Best Practice: The Debriefing Process
  - https://www.nursingsimulation.org/article/S1876-1399(21)00098-0/fulltext
- Cheng, A., Eppich, W., Epps, C., Kolbe, M., Meguerdchian, M., & Grant, V. (2021). Embracing informed learner self-assessment during debriefing: the art of plus-delta. Advance in Simulation, 6 (1):1-9.
- Dreifuerst, K.T. (2015, May). Getting started with debriefing for meaningful learning. Clinical Simulation in Nursing, 11(5), 268-275. http://dx.doi.org/10.1016/j.ecns.2015.01.005.
- Eppich, W. & Cheng, A. (2015). Promoting excellence and reflective learning in simulation (PEARLS): Development and rationale for a blended approach to health care simulation debriefing. Simulation in Healthcare, 10: 106-115.
- Phrampus, P.E., & O'Donnell, J.M. (2013). Debriefing using a structured and supported approach. In *The comprehensive textbook of healthcare simulation* (pp. 73-84). Springer, New York, NY.
- Rudolph, J.W., Simon R., Rivard P., Dufresne, R.L., & Raemer, D.B. (2007). Debriefing with good judgment: Combining rigorous feedback with genuine inquiry. Anesthesiology Clinics, 25: 361-376.
- Sawyer, T., Eppich, W., Brett-Fleegler, M., Grant, V., & Cheng, A. (2016). More than one way to debrief: a critical review of healthcare simulation debriefing methods. *Simulation in Healthcare,*
- Zigmont, J.J., Kappus, L.J. & Sudikoff, S.N. (2011). The 3D model of debriefing: Defusing, discovering, and deepening. Seminars in Perinatology, 35: 52-58.

Other Debriefing Scripting (e.g., case talking points, target questions to ask, etc.)

1. Is this patient appropriate for activity? How did you determine this?
2. What were key assessments for this patient?
3. Discuss the PT's response to a drop in SpO2 during activity and clinical reasoning
4. Which breathing treatments are most appropriate for this patient and why?

☐ See attachment for debrief script

Assessment/Outcome Measure

Name of Assessment(s)/Outcome Measure(s): Assessment modified from CIET tool

☒ See attachment for assessment/outcome measure

Case References

Include references, guidelines, best practices and/or content experts utilized in developing this scenario.

Sessions from Bridge the Gap Simulation, Virtual Conference, Nov 2020
Essentials in Clinical Simulations Across the Health Professions (an online non-credit course authorized by The George Washington University and offered through Coursera)
Hillegass E. Essentials of Cardiopulmonary Physical Therapy, 4th edition. St. Louis: Elsevier; 2017.

Note: Mock records; H&P, consultations, and door note can be added to end of template.

Add Attachments

CF Case Medical Chart Information.xlsx

Simulation Grading Rubric.xlsx