Simulation Design Template

Course PN 1A

Primary Health Condition: COPD acute exacerbation

Simulation Learning Objectives

Students participating in the Simulated Clinical Experience will:

1. **Conduct a head to toe assessment**
2. **Identify needs of a geriatric COPD patient**
3. **Use SBAR tool to communicate with other healthcare professionals**
4. **Identify and report critical lab values for the geriatric patient**
5. **Use appropriate assessment tools to identify geriatric syndromes evident in the patient**

Client Information:

Age: 70 **Date of Birth:** 10/10/47 **Gender:** male **Setting:** med/surg

Name: Henry Williams **Race/Ethnicity**: Caucasian

Weight: 88kg **Height:** 72 inches

Allergies: ink, betadine

Brief Description of Patient: Admitted last night with acute exacerbation of COPD

Past Medical History: COPD, CVD, asthma, hearing loss (wears HA)

Surgeries/Procedures & Dates: Appendectomy at age 15

Social History: Retired engineer for transit system

Religion: Christian **Major Support: Ertha (wife), Betty (daughter)**

Healthcare Provider: Dr. Nelson

Simulation Acute Care KARDEX

Patient Name: Henry Williams
DOB: 10-10-1947 Age: 70
Admitting Diagnosis: COPD, HTN

Allergies: betadine, ink
Code Status: Full Code
Admission Date: last night

SBAR Report (from ED)

Situation & Background

Patient was admitted last night with an acute exacerbation of COPD. He was not able to catch his breath and his doctor told him to go to the ER. His neighbor brought him to the ER. He is concerned about his wife, Ertha, who has problems with memory loss and seems confused at times. His daughter in law, Betty, is a nurse. She mentioned that Henry appears depressed because his appetite has diminished over the past 2 months and he has lost some weight. He has also lost interest in his previous activities, such as following major league football and working on crossword puzzles. Betty will look after Ertha while Henry is here.

Assessment

Labs drawn this morning are as follows:

CBC	BMP	ABG
WBC:9.0	K:4.0	PH: 7.34
Hgb:10.0	Na:137	PaCO2: 50
Hct:40.0	Mag: 2.1	HCO3: 27
	Phosphorus: 2.5	PaO2: 88
	BNP:100	
	Glucose:109	

Labs from last night's admission:

CBC	BMP	ABG
WBC:8.9	K:4.0	PH: 7.34
Hgb:10.0	Na:137	PaCO2: 60
Hct:40.0	Mag: 2.1	HCO3: 27
	Phosphorus: 2.5	PaO2: 82
	BNP:100	
	Glucose:114	

Past Medical History: COPD, cardiovascular disease

Surgical History: Appendectomy at age 15

Other Information

Race: Caucasian
Height: 72in Weight: 88kg
Social History: Retired engineer for the transit system
Major support: Ertha (wife), Betty (daughter in law)

Henry Williams Simulation: Report

Time: 0730 shift report

Henry Williams is a 70 year old male. He was admitted during the night with progressive shortness of breath. His oxygen saturation on admission was 82% on room air. He has a history of COPD, coronary artery disease, hypertension, and is hard of hearing. His oxygen saturation has improved and is now running 88% on 2 liters of oxygen by nasal cannula. His respiratory rate has been 24-30. His wife Ertha has gone home with his daughter in law Betty and will be back today. Ertha has early stage dementia. Blood pressure has been 134/88, heart rate 112, and respirations were 28. He is alert and oriented. The morning labs were drawn and *the physician wants to know the ABGs*. He denies pain, just says he is tired.

Henry Williams: Script for Introductory Monologue

(stops frequently during his story to breathe, O2 nasal cannula, coughs, appears hypoxic)

Hello, my name is Henry Williams. Life sure has changed over the last two, three years, retirement just isn't what we thought it would be… we… that would be Ertha and me. I spent my life working for the Transit Department, as an engineer for the rail system. I'm pretty proud of this accomplishment. I was on the forefront of desegregation in college and the workplace. Ertha and I have always been active and independent, so we thought we would retire to this nice apartment and do some traveling since it's just the two of us. We haven't done much of this with my health and now Ertha's. It's been a change moving from our nice home and gardens to an apartment but we have adjusted to that OK, I guess.

We lost our only son 10 years ago to the Gulf war – that really changed our lives as well; I don't think Ertha has ever been the same. He left us a lovely daughter-in-law, Betty and a grandson, Ty, but they live a couple of hours away in the city and it's hard for us to get there. And now, Ertha is getting forgetful and it's hard to leave her. We go to the Baptist church regularly but I can't let Ertha go alone to the ladies' stuff anymore. She used to go every Tuesday. But I guess you are here to learn more about me and what's going on with my health.

Well, no one could tell me to stop smoking you know, especially when I was younger. I started smoking when I was a teenager, everyone smoked back then. I have had frequent 'bouts of colds, bronchitis, asthma and so forth but now they tell me it's COPD, whatever that means, but it sounds scary. I also have a little high blood pressure, but it's not too bad.

I get so anxious now and I'm worried all the time about my wife, she is good some days and other days she can't remember things and she asks for Anthony, our son. That is so upsetting for both of us and she cries when I tell her he is gone. He was so proud to be in the armed forces but he had to go and serve overseas, he never came home to us.

I really lose my patience sometimes with Ertha. She forgets the stove is on, can't find her keys, forgets what day it is, and thinks Betty and Ty haven't visited us in years, when they were just here. I've had to watch her when she cooks, take her with me on walks. We just can't be apart and that gets frustrating. I worked every day so we were busy until we retired, now all of this heartache. Betty took Ertha home with her while I am sick here in the hospital but we need to think about a new plan so Ertha is cared for and I am too. I don't want a nursing home but I hear there are some of those apartments where they help you some. Maybe that would be a good place for us.

I sure feel bad today; I am so tired and short of breath. The doctor sent me here last night after I called his office and told him I couldn't catch my breath. My neighbor was home so she brought us in to the emergency room and took care of Ertha until Betty got here. I should be resting now; Ertha is in good hands with Betty the next few days, Betty is a nurse and can help her while I am in the hospital. I need to get some strength back. I hope my insurance will pay for this oxygen and these inhaler things I have to use when I go home. I already take two pills for my high blood pressure and a cholesterol pill, aspirin and a

breathing pill. Now they want to add inhalers and oxygen? What next? I already have an inhaler I use at home and it doesn't help. Ertha needs to take a bunch of pills too.

The social worker lady said we might have to go on a waiting list before we can go into those apartments where they help you with a bath and some food. Ertha doesn't eat so well and can't cook so well anymore so help would be nice. I suppose they will put me on some diet for my breathing now and Ertha can't manage that so we could let them do our meals. I wonder if they help with the medications and baths. Ertha gets upset when I make her shower. I have to rest now; you will have to ask me questions later.

Admission Date: Last night

SBAR Report: Patient was admitted last night with an acute exacerbation of COPD. He was not able to catch his breath and his doctor told him to go to the ER. His neighbor brought him to the ER. He is concerned about his wife, Ertha, who has problems with memory loss and seems confused at times. His daughter-in-law, Betty, is a nurse. She mentioned that Henry appears depressed because his appetite has diminished over the past 2 months and he has lost some weight. He has also lost interest in his previous activities, such as following major league football and working on crossword puzzles. Betty will look after Ertha while Henry is here.

Labs:

CBC, Chemistries, ABGs

Psychomotor Skills Required Prior to Simulation:
General head to toe assessment
Medication administration: oral, inhaled, oxygen
Familiarity with various assessment tools: Geriatric Depression Scale, Modified Caregiver Strain Index, Beers Criteria for Potential Inappropriate Medication Use in Older Adults, General Anxiety Disorder 7 (GAD-7)

Simulation Room Set- up:

Setting: med/surg unit   Type of Manikin Used: SimMan Essential

Props: (available for all simulations – BP cuff, pulse ox, glucometer, O2 set-up)
Additional Props: LR @ 50ml/hr

Initial Manikin Settings (sitting with Head of Bed slightly elevated-no more than 45 degrees)

Vitals	Lungs	Heart	Abdomen	Other
BP 138/90 HR 112 R 28 O2 sat 88%	Wheezes bilaterally	Normal sinus rhythm	normoactive	
Additional Moulage: bedside nebulizer, hearing aids				

NORTHWEST IOWA COMMUNITY COLLEGE Simulation Lab

Patient: Henry Williams
DOB: 10-10-47 Age: 70
Medical Rec: 123456

Physician Orders

Date/Time	*Orders*
Xx/xx/xx	Bedrest, BRP with assist
	Regular, low fat diet
	I & O
	Respiratory treatment: Albuterol nebulizer treatment albuterol 2.5mg and atrovent .5mg in 3cc NS q20 minutes x 3, followed by albuterol 2.5mg and atrovent .5mg in 3 cc NS q 2 hours (decrease frequency as tolerated)
	Oxygen: Maintain SaO2 at or above 90%. Nasal cannula @ 2 liters ABGs in 30 minutes, after the initiation of O2 therapy.
	Labs: CBC, biomedical profile, BNP
	IV: LR at 50ml/hr
	Prednisone 40mg daily x 10 days
	Advair diskus 250 q 12 hours
	Albuterol 2 puffs as needed for acute onset of shortness of breath
	Lisinopril 12.5mg po daily
	Lopressor 50mg po daily
	ASA 81mg po daily
	Crestor 20mg every evening
	Singulair 10mg every evening
	——————————————— *Dr. Nelson, M.D.*

Mock Medications Required:
Prednisone 40mg
Advair diskus
Lisinopril 12.5mg
Lopressor 50mg
ASA 81mg
Crestor 20mg
Singulair 10mg
Albuterol 2.5/atrovent .5 bullets

Documents required (indicate what information will need to be handwritten on forms):
✓**SBAR Report**
✓**Orders**
✓**Med Sheets**

Other documents:
Accordion file of assessment tools:
SPICES, Geriatric depression scale, modified caregiver strain index, Beers criteria for potential inappropriate medication use in older adults, general anxiety disorder 7 (GAD-7)

Scenario Progression Outline

Name: Henry Williams Age: 70 Date of Birth: 10-10-47

Timing (approximate)	Manikin Actions	Expected Interventions	Comments
0-10minutes	Afebrile, coughing, short of breath. Wheezing "I am really short of breath and so tired" "I didn't sleep well... I get anxious worrying about my wife." "Sit me up, do something to help me breathe better."	Vital signs Head to toe assessment Notice low oxygen saturation Apply oxygen	When oxygen is applied SaO2 goes up to 89%
10-15 minutes	"Am I due for a breathing treatment? They said I would be getting something soon." "Where are my pills and inhalers?"	Medication preparation and safe administration Continued assessment	Students check MAR, prepare medications for administration Use one or more assessment tools

15-25 minutes	"I need my pills, I can give my inhalers to myself, get those for me." "I'm going to need help at home with Ertha. She gets confused. I don't know if I can handle all of this…" Henry will continue to have shortness of breath and decreased O2 saturation if medications & respiratory treatment not administered.	Check labs, call results and assessments to MD using SBAR communication Student should assess for depression and/or potential caregiver strain on patient	End scenario when at least one assessment tool is used, medications administered, and SBAR given to MD with orders received and read back: "Try one DuoNeb (albuterol sulfate 3mg/ipratropium bromide 0.5mg) now and call my nurse back and let her know how he does with that."

"Healthcare Provider" Role

Students are expected to use the SBAR format when calling.

Expected SBAR Report:
(S) ***This is _________ and I am calling about ____________.***

(B) [Patient background information]

(A) [Assessment information at time of expected call]

(R)[Expected recommendation]

If students are missing some of the information, ask questions until you get the information they should have included. If they are missing a large amount of information ask them to gather the correct information and call you back.

Once you have sufficient information give the following orders:

1. **"Try one DuoNeb now and call my nurse back and let her know how he does with that."**

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