

INTERNATIONAL NURSING ASSOCIATION for Clinical Simulation and Learning

Dear Colleague,

As the Patient Safety in Healthcare Simulation Special Interest Group (SIG), we are proud to share with you several NextGen NCLEX cases and corresponding NLN simulation guides.

This SIG was formed by a small group of simulationists, formerly a part of the Patient Safety Task Force within the Quality and Safety Education for Nurses (QSEN) institute. In June 2022, the Patient Safety in Healthcare Simulation SIG was introduced and is now an active group that has grown to include 57 members committed to staying on the cutting edge of simulation science.

Early in its inception, SIG members decided to design patient-safety specific NextGen cases with corresponding simulation guides for distribution to INACSL members at the 2023 conference. Using the National Councils for State Boards of Nursing's (NCSBN) Clinical Judgment Measurement Model (CJMM), INACSL Healthcare Simulation Standards of Best Practice[™], and the NLN Simulation Template, scenarios were designed, reviewed, and are now available via QR code. Individual authors (*) and the reviewer (**) are acknowledged in the documents below. Each QR code will provide INACSL members with:

- 1. A patient-safety specific NextGen case or standalone scenario, and
- 2. a completed NLN Simulation guide.

The remainder of this document provides these components. The NextGen case is adaptable for use in your learning management system (LMS), classroom, lab, or clinical setting. The simulation guide can be implemented based on your school's individual simulation needs.

We hope that you find these resources helpful as we work together to prepare future healthcare providers for practice. We only ask that if any publications or presentations stem from the use of these resources, you credit INACSL's Patient Safety in Healthcare Simulation SIG as authors. Please direct any feedback to <u>laller@kent.edu</u> or <u>KT.Waxman@ucsf.edu</u>.

We wish you the best in your efforts to advance the science of simulation in healthcare!

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Case # 2: Older Adult Fall, Hepatitis C, Dehydration, UTI Level Appropriateness: mid-level medical-surgical

Scenario: The nurse in the outpatient clinic assesses an older adult client reporting fatigue.

Tab 1: Offi	ce Nurse's Note (0915)	NCSBN Domain: Recognizing Cues	
Client is an	older adult reporting severe fatigue lasting approximately 14 days.	The office nurse reports abnormal findings to the physician	
Stating, "It s	started out I just needed a nap in the middle of the day. Now, the	who then assesses the client and determines the need for	
past three o	lays, I could barely get off the couch". Alert & oriented x 4, sclera	the client to be transferred to the ED for a suspected relapse	
and skin ye	llow with scabs and scratches of both arms, neck, and upper chest.	of hepatitis C (HCV) and rule out urinary tract infection (UTI).	
Lungs clear,	, abdomen distended and firm with bowel sounds x 4; last bowel	STAT labs are ordered, drawn and sent to the lab.	
movement	yesterday; also reports nausea with vomiting 2-3 x/day and right		
upper and I	ower abdominal pain 7/10. States, "I can't keep much downjust	Question #1: Click to highlight the abnormal findings.	
sips of wate	er and crackers". Peripheral pulses equal x4, hand grasps weak and		
equal. CBC,	BMP, Liver enzymes and urinalysis specimens collected and sent to	Client is an older adult reporting severe fatigue lasting	
lab.		approximately 14 days. Stating, "It started out I just needed	
		a nap in the middle of the day. Now, the past three days, I could barely get off the couch". Alert & oriented x 4, sclera	
0930 Vital S	bigns		
		and skin yellow. Lungs clear, abdomen distended and firm	
Vital Sign	Value	with bowel sounds x4; last bowel movement yesterday; also	
BP	96/59 mmHg	reports hausea with vomiting 2-3 x/day and right upper and	
HR	122 beats/minute	downiust sips of water and crackers". Peripheral pulses	
RR	14 breaths/minute	equal x4, hand grasps weak and equal. BP 96/59, HR 122, R	
Т	100.8 ° F (38.2 ° C)	14, T 100.8 ° F (38.2 ° C), SpO ₂ 92% on room air, Pain 7/10	
SpO ₂	92% on room air	upper and lower right abdomen.	
Pain	7/10 upper and lower right abdomen		
0950 Health Medical Ser	ncare provider (HCP) requests client be transported via Emergency rvices (EMS) to the Emergency Department (ED).		



Tab 2: Laboratory and Diagnostic Results (1030)			NCSBN Domain: Analyze Cues		
Lab Result Interpretation			Question #2. For each assessment finding below, click to		
Sodium	147 mEq/L (144 mmol/L)	High	specify whether the finding is consistent with hepatitis C, dehydration, and/or UTI. Each finding may support more		
Potassium	4.9 mEq/L (4.9 mmol/L)	Normal			
Magnesium	1.7 mEq/L (1.7 mmol/L)	Normal			
Glucose	148 mg/dL (8.22 mmol/L)	High	Nausea	1. Hepatitis C	
WBC	13,250/mm ³ (11.3 × 10 ⁹ /L)	High		 Dehydration UTI 	
Hemoglobin	11 g/dL (110 g/L)	Low			
Hematocrit	30% (0.3)	Low	Extreme fatigue	1. Hepatitis C 2. Debydration	
Platelet	101,000/mm³ (101 × 10 ⁹ /L)	Low	2. Denydration 3. UTI		
Albumin	2.9 g/dL (29 g/L)	Low	Low Hgb/Hct	1. Hepatitis C	
ALT	229 units/L (3.82 μKat/L)	High	2. Dehydration 3. UTI		
AST	204 units/L (3.41 μKat/L)	High			
			Elevated liver enzymes	1. Hepatitis C	
Diagnostic Results: Urina	alysis		2. Dehydration	2. Dehvdration	
Character	Result	Reference Range		3. UTI	
Color	Dark amber				
Clarity	Cloudy	Clear	Elevated WBCs	1. Hepatitis C	
рН	7.9	4.5 - 7		2. Dehvdration	
Specific gravity	1.039	1.010 - 1.030		3. UTI	
Glucose	Negative	Negative			
Blood	Positive	Negative	Urinalvsis	1. Hepatitis C	
Ketones	Negative	Negative	- ,	2. Dehydration	
Protein	Positive	Negative		3. UTI	
White Blood Cells	32	0-5			
Red Blood Cells	4	0-4			
Bacteria	Many	Negative			



Tab 3: ED Triage Note			NCSBN Domain: Prioritize Hypotheses		
ED Triage Note (1045)			Question #3		
ED Triage Note (1045) Older client received via ambulance from the healthcare provider's (HCP) office accompanied by the client's daughter. Client is lethargic but arousable, A&Ox2 stating, "I just want to sleep". Skin and sclera yellow, dry oral mucous membranes; spouse states client has been unable to keep food or fluids down x 2-3 days and keeps scratching arms. Noted multiple scabbed areas on arms and neck. Lungs clear, abdomen distended and firm with bowel sounds x4; (+) pedal pulses x4, hand grasps weak but equal. Reports pain in right upper and lower abdomen 8/10. 1045 Vital Signs Vital sign Value		Question The ED client a senten The nu due to Dropdo 1. 2. 3. 4.	on #3 on urse conducts a triage assessment when the arrives via ambulance. Complete the following ce by choosing from the list of options. rse knows the client is at risk for 1)		
HR	112 beats/minute				
RR	16 breaths/minute	Dropdo	own 2		
Т	100.8 ° F (38.2 ° C)	1.	Abdominal pain.		
SpO ₂	92% on room air	2.	Jaundiced sclera and skin.		
Pain	Upper and lower right abdomen @ 8/10	3.	Vomiting.		
		4.	Fatigue.		
		Dropdo	own 3		
		1. 2. 3. 4.	Hypervolemia. Level of consciousness. Tachycardia. Hypovolemia.		



Tab #4: Admission Note and Orders	NCSBN Domain: Generate Solutions		
1115 Call received from HCP requesting direct admission with the following	Question #4		
 Tab #4: Admission Note and Orders 1115 Call received from HCP requesting direct admission with the following orders: Admission Diagnosis: Dehydration, Chronic Hepatitis C, Change in Mental Status Obtain home medication list from the Electronic Health Record (EHR) and return call to review 500 ml bolus of IV 0.9% NaCl, then @ 200 mL/hour x 1 liter, then 125mL/hour Hydroxyzine 25 mg PO every 8 hours Ambulate with assistance 	 NCSBN Domain: Generate Solutions Question #4 Which three interventions are priority for the nurse to include in the plan of care? 1. Initiate IV fluids. 2. Encourage PO food intake. 3. Instruct in coughing and deep breathing. 4. Instruct client to only get up with assistance. 5. Obtain an order for an indwelling urinary catheter. 		
 Clear liquid diet – advance as tolerated Intake and output Vital signs every 4 hours Maintain SpO2 > or = to 94% Obtain urine culture and sensitivity CBC and BMP every am 	 6. Ask the client and spouse if they want a chaplain. 7. Initiate oxygen via nasal cannula. 		



Tab 5: Adı	mission to the Medical-Surgical Unit	NCSBN Domain: Take Actions		
1215 Med	ical-Surgical Nurse's Note:	Question #5		
Client arriv	ved on the unit via transport from the Emergency Department (ED)			
accompan	ied by the client's daughter. Client is alert & oriented to name and	Complete the following sentences by choosing from the		
place, leth	argic, and falls asleep during sentences. Skin and sclera are golden	list of options for each blank.		
yellow; cli	ent scratching arms and upper chest, stating "it's so itchy!". Oral			
mucous m	embranes are dry and intact. Hand grasps are weak but equal. Lungs	Initially, the nurse should 1) Next, the		
are clear b	out diminished throughout. Abdomen distended and firm with bowel	nurse should 2), 3),then		
sounds x 4	Client reports tenderness when upper and lower right abdomen	finally 4)		
palpated.	Reports persistent nausea with last emesis this morning at home. Has			
not voided	yet today. Non-pitting edema of bilateral lower extremities +2. Home	Dropdown 1		
medicatio	ns list from EHR compared to the list from the daughter who has been	1. Instruct the client to ask for help to get up		
setting up	medication organizer box for both the client and the client's spouse.	2. Notify HCP of the client's arrival to the unit		
	(1000)	3. Check vital signs		
Vital Signs		Drendeure 2		
BP	94/54 mmHg	Dropdown 2		
HR	124 beats/minute	2. Elevate the lower extremities		
RR	22 breaths/minute	2. Elevate the lower extremities		
Т	100.8 ° F (38.2 ° C)			
SpO2	93% on 2L O2 via NC	Drondown 3		
Pain	8/10 right upper and lower abdomen	1. Provide oral mouth swabs		
		2. Increase oxygen to 3L via nasal cannula		
		3. Apply wrist restraints		
		- p.p. /		
		Dropdown 4		
		1. Contact the HCP for an order for pain medication		
		2. Administer hydroxyzine		
		3. Collect CBC and BMP		
Developed	hy the INACSI Patient Safety in Simulation Special Interest Group			

Next Generation NCLEX Sub-committee 4.25.23



Tab 6: Nurse's Notes				NCSBN Domain: Evaluate Outcomes		
1500 Nurse's Note				Question #6		
Outside client's room and heard a loud noise followed by someone calling, "we				Using the shift end summary and most recent vital signs,		
need help in here	!". Entered the room, and unli	censed assistive personn	el (UAP)	click to specify whether it in	dicates th	nat the client's
was sitting next to	o the client. IV pole, pump, and	d client lying on the floor.	The	condition has improved, has	s not char	nged, or has declined
client has a bleed	ing laceration on the right tem	ple. Assessment otherwi	se			
without change. T	he client's daughter stated, "I	only left for a minute to	get a cup	Assessment Finding	0	utcome
of coffee!". Call to	o in-house resident who visited	d client, placed three stite	ches in	Orientation	0	Improved
3cm laceration an	d covered with a dry sterile dr	essing. Sent client to CA	۲ scan.		0	No Change
					0	Declined
1750 Nurse's Not	e – Shift end summary			Sclera and skin color	0	Improved
Client resting in b	ed, awakens easily to name ca	lled. Alert & oriented to	person,		0	No Change
place, and time. S	clera and skin golden yellow –	lotion applied to skin by	client's		0	Declined
daughter earlier t	his afternoon. Forehead dress	ing with scant amount		Oxygenation	0	Improved
sanguineous drair	nage. Client received morphine	e 2 mg IV at 1400 and 170	00 and		0	No Change
hydroxyzine at 1400 and reports less itching. Voided 350ml dark amber urine.					0	Declined
CAT scan results n	negative. Reinforced with clien	t need to stay in bed and	use call	Hypovolemia	0	Improved
light if needs to ge	et up to the bathroom. Client	verbalized understanding			0	No Change
					0	Declined
Vital Signs	1505	1705	1	Pain	0	Improved
BP	100/73 mmHg	100/68 mmHg	-		0	No Change
HR	89 beats/minute	96 beats/minute			0	Declined
RR	22 breaths/minute	20 breaths/minute		Fever	0	Improved
Т	39.0C (102.2F)	39.0C (102.2F)			0	No Change
SpO2	94% on 4L O2 via NC	95% on 4L O2 via NC			0	Declined
Pain	3/10 forehead	5/10 right upper and	-	Pruritis	0	Improved
	5/10 right upper and	lower abdomen			0	No Change
	lower abdomen				0	Declined
L	I	1	4	Urinary output	0	Improved
					0	No Change

• Declined



Question #1: Recognizing Cues

Faculty Notes:

This is a Highlight Text style NGN question.

The scenario is introduced in the top left of page 1. This gives the student the location and general information about the client as they prepare to assume care. When reviewing this case with students, additional questions may include:

- Which of the findings would require follow-up by the RN?
- What is relevant/irrelevant?
- What information is most important?
- What is of immediate concern?

Learning Outcome: Can the student identify the most important information from different sources (nurse's note, history, medications)?

Student feedback:

The first question in a six-question set is asking the student to identify abnormal, incorrect, concerning findings. In highlight questions, if you click on any part of the phrase, the whole phrase will be highlighted.

Client is an older adult reporting severe fatigue lasting approximately 14 days. Stating "It started out I just needed a nap in the middle of the day. Now the past three days I could barely get off the couch". Alert & oriented x 4, sclera and skin yellow with scabs and scratches of both arms, neck and upper chest. Lungs clear, abdomen distended and firm with bowel sounds x4; last bowel movement yesterday; also reports nausea with vomiting 2-3 x/day and right upper and lower abdominal pain 7/10. States "I can't keep much down...just sips of water and crackers". Peripheral pulses equal x4, hand grasps weak and equal. BP 96/59, HR 122, R 14, T 100.8 ° F (38.2 ° C), SpO₂ 92% on room air, Pain 7/10 upper and lower right abdomen.



Question #2: Analyze Cues

This is a Matrix Multiple Response style NGN question.

Faculty Notes:

New information may or may not be added as the case progresses. In this case, there is new information on the left side. Encourage students to always look at and read through any new information before attempting to answer the question on the right. This practice will help students slow down and take the time needed to make safe clinical judgments.

When reviewing this case with students, additional questions may include:

- What patient conditions are consistent with the cues?
- Are there cues that support or contraindicate a particular condition?
- What are the potential complications for this patient?
- Why is a particular cue or set of cues a concern?
- What other information is needed to establish the significance of the cue/cues?

Learning Outcomes:

- The student is able to demonstrate the interpretation of the most important information (what is happening)?
- The student is able to demonstrate the consideration of the multiple things that could be happening?

Student Feedback:

When beginning the next question, always review any information on the left side or top of the right side of the page. There may be new information that has been added.

Nausea, fatigue or malaise, anemia, elevated liver enzymes, and dark, concentrated urine are all signs/symptoms of an exacerbation of chronic Hepatitis C.

Some of the signs/symptoms of dehydration include dark, concentrated (high specific gravity) urine.

Signs/symptoms of a UTI, especially in an older adult, include fatigue, elevated serum WBC's, and the presence of blood, protein, WBC's and bacteria evident on the urinalysis.



Question #3: Prioritize Hypothesis

This is a **Cloze Dropdown** style NGN question.

Faculty Notes:

Ranking and prioritizing patient information/problems according to changes in patterns, and trends by ranking hypotheses referring to client needs based on priority, terms of risks, difficulty and/or urgency. While this client has a lot of needs, help the students see that airway, breathing, and/or circulatory (ABCs) take priority over other concerns.

When reviewing this case with students, additional questions may include:

- Which explanations are most/least likely?
- Which possible explanations are most serious?
- What are the standards of care that will help set priorities for the client and their condition?

Learning Outcomes:

- 1. The student will be able to synthesize important information to determine the most important client needs.
- 2. The student will be able to justify the "why" or rationale for selecting the correct priority issue.

Student Feedback:

Fluid volume deficit is a fluid and electrolyte imbalance that may occur due to nausea and vomiting, and lead to dehydration. Common risk factors for fluid volume deficit include nausea and vomiting, serious injury or trauma, as well as major surgery. While this client does exhibit tachycardia and decreased level of consciousness, the overall hypovolemia is a more comprehensive explanation for the findings of decreased BP, elevated HR, dry skin and mucous membranes.

One of the helpful strategies in identifying priority needs is to take into consideration the client's airway, breathing, and/or circulation (ABCs).



Question #4: Generate Solutions

This is a **Multiple Response (N)** style NGN question.

Faculty Notes:

Assist the students to consider and act on the best nursing interventions and actions, identify expected outcomes while using hypotheses to determine possible actions, interventions, or a plan of care. When reviewing this case with students, additional questions may include:

- What are the desired outcomes?
- What interventions can achieve the outcomes?
- What should be avoided?

Learning Outcome:

1. The student will be able to develop care options that align with or meet patient care needs at this point in time.

Additional note: Another patient-safety-related point to be raised with students is the dangerous look alike-sound alike (LASA) medications as published by the Institute for Safe Medication Practices (ISMP). Hydralazine and hydroxyzine are LASA medications with potentially fatal implications if, for example, in this case, hydralazine is administered to a hypotensive client instead of the hydroxyzine that was ordered for pruritis.

Student Feedback:

The following provides an explanation regarding the "generate solutions" answer choices. When considering the choices, keep in mind that the client is experiencing airway-breathing-circulation (ABCs) issues so the solutions generated should be ABC-related answers.

- 1. **Correct.** Initiate IV fluids. *The client's hypotension, tachycardia, dry skin and mucous membranes all indicate the need for additional circulating fluid volume. This answer is a circulatory answer.*
- 2. Incorrect. Encourage po food intake. The client is lethargic, so solid food is a potential choking hazard; the diet order is also to start with clear liquids.
- 3. Incorrect. Instruct in coughing and deep breathing. *The client's lungs are clear with no reason to make this a priority intervention.*
- 4. **Correct.** Instruct client to only get up with assistance. *The client is hypotensive and at risk of falling. Even though the client is lethargic, this is a safety intervention that should be a priority.*



- 5. **Incorrect.** Obtain an order for an indwelling urinary catheter. *There is no indication that an indwelling urinary catheter is needed and would increase the client's chance of infection.*
- 6. **Incorrect.** Ask the client and the client's daughter if they want a chaplain. *There is no indication that a chaplain is needed. The client's immediate needs are physical to ensure adequate circulating fluid volume and oxygenation.*
- 7. Correct. Initiate oxygen via nasal cannula. *Improving oxygenation is appropriate as current order is to maintain SpO2 > or = to 94%*.



Question #5: Take Actions

This is a Dropdown Cloze-style NGN question.

Faculty Notes:

Implementing the interventions based on the highest needs of the patient requires the students to understand and use knowledge of the "why" and "how to" for common nursing interventions/actions.

When reviewing this case with students, additional questions may include:

- Which interventions or combination of interventions are most appropriate?
- What nursing actions were performed based on client preferences and needs which is most appropriate?
- How should the intervention(s) be accomplished/performed/administered, communicated, taught, documented, etc?

Learner Outcomes:

- 1. The student will be able to correctly perform appropriate actions/interventions.
- 2. The student will demonstrate an understanding of the "how" and "why" of all actions taken.

Student Feedback:

The correct options that complete the sentence are:

Initially, the nurse should instruct the client to ask for help to get up. Keep in mind that safety options are often appropriate; in this case, there is a current set of vital signs and while it will be important to notify the HCP of the client's arrival, this is not a priority action.

Next, the nurse should <u>start IV fluids as ordered</u>. Since hypovolemia is one of the most concerning issues, starting the fluid bolus will help to improve the circulating blood volume. The client's mental status at this point is lethargic so eating and drinking places the client at risk for aspiration and the client's order is 'clear liquids – advance as tolerated' meaning the nurse must use clinical judgment to make appropriate determinations to keep the client safe.

The next action that would be appropriate is to <u>increase oxygen to 3L via nasal cannula</u> as the SpO2 on 2L is still below the parameters ordered. This is also a breathing-related action (ABCs).

The final step in completing the sentence is to contact the HCP for an order for pain medication based on the client's reported pain of 8/10.



Question #6: Evaluate Outcomes

This is a Matrix Multiple Response style NGN question.

Faculty Notes:

At this point in the case, the students should look back over the events to evaluate the effectiveness of the plan of care based on the client's response to the interventions. Remind students that evaluation is crucial to determine if how the client is being cared for is good, right, safe, and improving or if adjustments need to be made.

When reviewing the case with students, additional questions that may be appropriate include:

- What signs point to improving/declining/unchanging status?
- Would other interventions have been more effective?
- What are the findings and what impact it makes to the client (+, or neutral), considering/comparing the observed client outcomes to expected outcomes?
- What interventions/actions (previously identified) made a change/difference in the client whereby their condition improved, declined or there was no change?
- Were the interventions/actions effective or positive? If not, what adjustments are needed to the plan of care?

Learner Outcomes:

- 1. The student will be able to determine if the current interventions and plan of care are effective based on the most recent client data.
- 2. The student will be able to evaluate which interventions are working and which are not.
- 3. The student will be able to verbalize the need to re-prioritize and/or adjust the plan of continued care of the client.

Student Feedback:

Think about all of the events that happened throughout this case. Compare current assessment data to previous findings to determine if each finding is improving, not changing, or declining. At this point, the nurse would make adjustments if needed as the care of the client continued.

The client's orientation, oxygenation, hypovolemia, pruritis, and urinary output have improved. The jaundiced sclera and skin tone have not changed and the pain and fever have declined. By evaluating these indicators, the nurse will make adjustments to the plan of care.



References

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Ignatavicius D., Workman, M. L., Rebar, C., & Heimgartner, N. M. (2021). *Medical-surgical nursing concepts for interprofessional collaborative care* (10th edition.). Elsevier.

US Food and Drug Administration (FDA) and Institute for Safe Medication Practices (ISMP). FDA and ISMP Lists of Look-Alike Drug Names with Recommended Tall Man Letters. ISMP; 2023.

Acknowledgments:

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Simulation Design Template (Revised February 2023)

INACSL Patient Safety in Simulation Special Interest Group Case #2: Older Adult Fall, Hepatitis C, Dehydration, Rule out UTI

Date: Discipline: Nursing Expected Simulation Run Time: Location: Today's Date:

File Name: Student Level: Junior, Med-Surg Guided Reflection Time: Twice the amount of time that the simulation runs. Location for Reflection:

Brief Description of Patient					
Name: Paul Cameron	me: Paul Cameron Pronouns: Did not ask				
Date of Birth: 4/12/XXXX	Age: 79				
Sex Assigned at Birth: male	Gender Identity: Did not ask				
Sexual Orientation: Did not ask	Marital Status: Married				
Weight: 121 pounds	Height: 64"				
Racial Group: Caucasian	Language: English	Religion: Catholic			
Employment Status: Full-time Insurance Status: Insured Veteran Status: Retired					
Support Person: Sarah McLain (daug	ghter) Support Phone: 102-345-9984				
Allergies: None	Allergies: None Immunizations: unknown				
Attending Provider/Team: Primary Care Provider Dr. P. Walters					
Past Medical History: Hepatitis C, Benign Prostatic Hypertrophy (BPH)					
History of Present Illness: Nausea and vomiting x 3 days, sclera and skin jaundice, pruritis.					
Social History: Smoked ½ to 1 pack of cigarettes/day but stopped at age 50; occasional alcohol use; denies					
illicit drug use					
Primary Medical Diagnosis: Exacerbation Hepatitis C, BPH					
Surgeries/Procedures & Dates: Left rotator cuff repair 2017					

Simulation Design Template (revised February 2023)

© 2023, National League for Nursing. Originally adapted from Childs, Sepples, Chambers (2007). Designing simulations for nursing education. In P.R. Jeffries (Ed.) *Simulation in nursing education: From conceptualization to evaluation* (p 42-58). Washington, DC: National League for Nursing.

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Psychomotor Skills Required of Participants Prior to Simulation

(list skills) Focused assessment skills IV insertion and maintenance Laboratory results interpretation

Cognitive Activities Required of Participants Prior to Simulation

(textbooks, lecture notes, articles, websites, etc.)

Become familiar with the Institute for Safe Medication Processes IMSP's Look-Alike Drug Names (<u>www.ismp.org</u>).

Plan of care development for an older adult with chronic liver disease. Review physiology of hepatitis C, including infection control precautions. Review medications used to treat chronic hepatitis C. Review fluid and electrolyte imbalance, hemodynamic instability and interventions to correct.

Review medication information (dosage, action, indications, contraindications, adverse effects, nursing implications) for the following:

- 1. Hydroxyzine
- 2. Morphine sulfate

Simulation Learning Objectives

General Objectives (Note: The objectives listed below are general in nature and once learners have been exposed to the content, they are expected to maintain competency in these areas. Not every simulation will include all the objectives listed.)

- 1. Practice standard precautions.
- 2. Employ strategies to reduce risk of harm to the patient.
- 3. Conduct assessments appropriate for care of patient in an organized and systematic manner.
- 4. Perform priority nursing actions based on assessment and clinical data.
- 5. Perform priority nursing actions in the case of a client fall.
- 6. Reassess/monitor patient status following nursing interventions.
- 7. Communicate with patient and family in a manner that illustrates caring, reflects cultural awareness, and addresses psychosocial needs.
- 8. Communicate appropriately with other health care team members in a timely, organized, patient-specific manner.
- 9. Make clinical judgments and decisions that are evidence-based.
- 10. Practice within nursing scope of practice.
- 11. Demonstrate knowledge of legal and ethical obligations.



Simulation Scenario Objectives (limit to 3 or 4)

- 1. The student will be able to recognize and analyze clues (initial, as condition changes).
- 2. The student will be able to prioritize client problems and generate appropriate solutions.
- 3. The student will be able to take actions that are evidence-based and appropriate to the client's condition.
- 4. The student will be able to evaluate the outcomes of their actions and verbalize if changes are needed.

Faculty Reference

(references, evidence-based practice guidelines, protocols, or algorithms used for this scenario, etc.)

The Healthcare Simulation Standards of Best Practice™ <u>https://www.inacsl.org/healthcare-simulation-standards</u>

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Setting/Environment

Faculty Note: Sections of this Next Generation Case #1 can be used to develop several simulation scenarios. For the purpose of this guide, the client's care in the SICU will be used.

Emergency Department	
🔀 Medical-Surgical Unit	🗌 OR / PACU
Pediatric Unit	Rehabilitation Unit
🗌 Maternity Unit	Home
🗌 Behavioral Health Unit	Outpatient Clinic
	Other:

Equipment/Supplies (choose all that apply to this simulation)

Simulated Patient/Manikin(s) Needed: Older adult male

Recommended Mode for Simulator:

(e.g. manual, programmed, etc.)

Faculty Note: The mode will be determined by the equipment and trained faculty available.



Other Props & Moulage: forehead dressing with small amount sanguinous drainage (late in the simulation)

Equipment Attached to Manikin/Simulated Patient:	Equipment Available in Room:
ID band	Bedpan/urinal
igee IV tubing with primary line fluids running at 125 mL/hr	\boxtimes 02 delivery device 1) nasal cannula, 2) non-
Secondary IV line supplies	rebreather mask
IVPB	🗌 Foley kit
🔀 IV pump x2	Straight catheter kit
PCA pump	Incentive spirometer
Foley catheter withmL output	Fluids
igtiadrightarrow 02 (nasal cannula and non-rebreather mask)	IV start kit
🔀 Telemetry monitor attached	🖂 IV tubing
🔀 Other: suture kit	IVPB tubing
	IV pump x2
Other Essential Equipment:	Feeding pump
Medications and Fluids:	Crash cart with airway devices and emergency
🛛 Oral Meds: hydroxyzine mg	medications
🔀 IV Fluids: 2 Liters 0.9%NaCl	Defibrillator/pacer
IVPB:	Suction
🔀 IV Push: morphine 2mg	Other: dry sterile dressing
🔀 IM or SC: lidocaine	

Roles

Faculty Note: Adjust based on number of students, purpose of simulation, etc.

🖂 Nurse 1	Observer(s)
🖂 Nurse 2	🔀 Recorder(s)
Nurse 3	🔀 Family member #1 - daughter
Provider (physician/advanced practice nurse)	Family member #2
Other healthcare professionals:	Clergy
(pharmacist, respiratory therapist, etc.)	Unlicensed assistive personnel
	Other:

Guidelines/Information Related to Roles

Learners in role of nurse should determine which assessments and interventions each will be responsible for, or facilitator can assign nurse 1 and nurse 2 roles with related responsibilities.

Information on behaviors, emotional tone, and what cues are permitted should be clearly communicated for each role. A script may be created from Scenario Progression Outline.



Pre-briefing/Briefing

Prior to report, participants will need pre-briefing/briefing. During this time, faculty/facilitators should establish a safe container for learning, discuss the fiction contract and confidentiality, and orient participants to the environment, roles, time allotment, and objectives.

For a comprehensive checklist and information on its development, go to <u>http://www.nln.org/sirc/sirc-resources/sirc-tools-and-tips#simtemplate</u>.



Report Students Will Receive Before Simulation

(Use SBAR format.)

Time: 1215

Person providing report: ED nurse reporting to med-surg nurse

Situation: 79-year old male client was seen in the HCP office earlier today then transferred for a direct admission: acute exacerbation hepatitis C, dehydration, possible UTI.

Background: Brought to ED from doctor's office. Labs and urinalysis obtained in the office and sent to lab. History of chronic hepatitis C and BPH. No known allergies. Smoked ½ - 1 pack of cigarettes/day but quit at age 50, occasional alcohol use, and lives with elderly spouse. Accompanied by daughter.

Assessment: Client received via ambulance accompanied by spouse. Client is an older adult seen in physician's office; physician ordered transfer to ED. Client is lethargic but arousable, A&Ox2 stating "I just want to sleep". Skin and sclera yellow, dry oral mucous membranes; spouse states client has not been able to keep food or fluids down x 2-3 days and keeps scratching arms. Noted multiple scabbed areas on arms and neck. Lungs clear, abdomen distended and firm with bowel sounds x4; (+) pedal pulses x4, hand grasps weak but equal. Reports pain in right upper and lower abdomen 8/10.

Vital Signs	
BP	95/58 mmHg
HR	112 beats/minute
RR	16 breaths/minute
Т	100.8 ° F (38.2 ° C)
SpO2	92% on room air
Pain	Upper and lower right
	abdomen @ 8/10

Recommendation: Monitor hemodynamics, start IV and administer bolus fluids, reinforce safety measures due to decreased level of consciousness, monitor oxygenation.



Scenario Progression Outline

Patient Name: Joseph Harvey

Date of Birth: 11/27/1966

Timing (approx.)	Manikin/SP Actions	Expected Interventions	May Use the Following Cues
0-5 min	(Verbal information	Learners should begin by:	Role member providing cue:
	provided by manikin or SP should be in quotes so a script can be created for individuals in those roles.)	 Performing hand hygiene Introducing selves Confirming patient ID 	 Cue: Think about what you do to prepare to care for patient. Did you take notes on report?
5-10 min		 Learners are expected to: Recognize fluid volume deficit and poor oxygenation signs & symptoms Obtain orders and intervene to rescue and provide treatment 	 Role member providing cue: Cue: What do the vital signs indicate about the patient's hemodynamic status? What is the rationale for the admission orders provided by the healthcare provider (HCP)? What does the nurse anticipate should be done first?
10-15 min		 Learners are expected to: Provide teaching regarding safety, getting assistance before getting out of bed; reinforce with daughter. 	 Role member providing cue: Cue: What are the priority orders? Describe the rationale for prioritization. Describe the process of starting an IV.
15-20 min		 Learners are expected to: Take action to start IV fluid bolus, adjust oxygen to meet parameters, and monitor client/take appropriate actions when the client falls. 	 Role member providing cue: Cue: What are the appropriate actions if the client falls? Which parameters should be monitored?
10-15 min		 Learners are expected to: Evaluate outcomes of actions. 	 Role member providing cue: Cue: Were the interventions effective? Is the client's condition improving, declining, or indicating no change?



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	 What could have been done differently?



Debriefing/Guided Reflection

Note to Faculty

We recognize that faculty will implement the materials we have provided in many ways and venues. Some may use them exactly as written and others will adapt and modify extensively. Some may choose to implement materials and initiate relevant discussions around this content in the classroom or clinical setting in addition to providing a simulation experience. We have designed this scenario to provide an enriching experiential learning encounter that will allow learners to accomplish the <u>listed objectives</u> and spark rich discussion during debriefing. There are a few main themes that we hope learners will bring up during debriefing, but if they do not, we encourage you to introduce them.

Themes for this scenario:

- Hemodynamic instability/dehydration due to nausea and vomiting and liver disease.
- Poor oxygenation due to low Hgb & Hct, hypotension, tachycardia, etc.
- Manage pain conservatively due to the potential CNS depression with the use of opioids in the older adult population.
- Procedure when a client falls.
- Recognize, intervene, and evaluate outcomes related to hepatitis C exacerbation.

We do not expect you to introduce all of the questions listed below. The questions are presented only to suggest topics that may inspire the learning conversation. Learner actions and responses observed by the debriefer should be specifically addressed using a theory-based debriefing methodology (e.g., Debriefing with Good Judgment, Debriefing for Meaningful Learning, PEARLS). The debriefing questions for consideration are organized into the phases of debriefing, as recommended by the Healthcare Simulation Standard of Best Practice[™] The Debriefing Process. The following phases are included below: Reactions/Defuse, Analysis/Discovery and Summary/Application. Remember to also identify important concepts or curricular threads that are specific to your program.

Debriefing Phase	Debriefing Questions for Consideration		
Reactions/	How did you feel throughout the simulation experience?		
Defuse	Give a brief summary of this patient and what happened in the simulation.		
	What were the main problems that you identified?		
Analysis/ Discovery	Discuss the knowledge guiding your thinking surrounding these main problems.		
	What were the key assessment and interventions for this patient?		
	Discuss how you identified these key assessments and interventions.		
	Discuss the information resources you used to assess this patient. How did this guide your care planning?		
	Discuss the clinical manifestations evidenced during your assessment. How would you explain these manifestations?		
	Explain the nursing management considerations for this patient. Discuss the		
	knowledge guiding your thinking.		



	What information and information management tools did you use to monitor this patient's outcomes? Explain your thinking.		
	How did you communicate with the patient?		
	What specific issues would you want to take into consideration to provide for this patient's unique care needs?		
	Discuss the safety issues you considered when implementing care for this patient.		
	What measures did you implement to ensure safe patient care?		
	What other members of the care team should you consider important to achieving		
	good care outcomes?		
	How would you assess the quality of care provided?		
	What could you do improve the quality of care for this patient?		
Summary/ Application	If you were able to do this again, how would you handle the situation differently?		
	What did you learn from this experience?		
	How will you apply what you learned today to your clinical practice?		
	Is there anything else you would like to discuss?		

Guided Debriefing Tool

The NLN created a Guided Debriefing Tool to provide structure from which facilitator observations can make objective notes of learner behaviors in simulation in direct relationship to the <u>learning outcomes</u>. <u>Download</u> <u>the NLN Guided Debriefing Tool</u>.

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