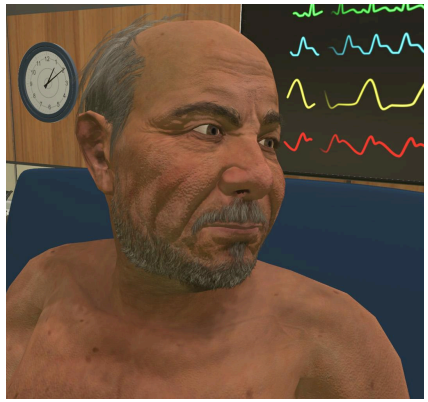
Open RN Virtual Reality Scenario Plan

PROVIDING END OF LIFE CARE FOR A CLIENT WITH END STAGE HEART FAILURE

Open RN Virtual Reality Scenario

PROVIDING END OF LIFE CARE - END STAGE HEART FAILURE- LEVEL 2

Scenario



Hector Fernandez, a 62-year-old Hispanic male, was admitted to a long-term care facility several months ago with chronic heart failure and recurrent falls. He was subsequently diagnosed with new onset diabetes mellitus and developed an infected pressure ulcer. Months later, he contracted Influenza A during a nursing home outbreak, causing a further decline in his health. He was recently admitted into hospice care with end-stage heart failure last week. Students provide care to Hector who is actively dying and provide therapeutic communication to his family member who is at the bedside.

Estimated Scenario Time: 30 minutes - Estimated Debriefing Time: 60 minutes

Learning Objectives

1. Assess a hospice patient with advanced chronic conditions in the long-term care setting, differentiating between expected end-of life changes and those indicative of acute exacerbations.
2. Conduct a comprehensive head-to-toe assessment of a hospice patient considering the unique needs and comfort measures required in end-of-life care.
3. Provide health teaching to clients and their family members on the progression of chronic conditions, symptom management at end of life, and the goal of comfort in the end-of-life stage.
4. Demonstrate safe and compassionate medication administration techniques tailored to the needs of a hospice patient in the long-term setting.
5. Perform necessary comfort-oriented treatments, focusing on symptom relief and enhancing the patient's quality of life in the end-of-life stage.
6. Utilize therapeutic communication techniques that are sensitive to the emotional psychological needs of the patient and their family during the end-of-life journey.
7. Effectively communicate with the healthcare provider using the ISBAR format in the context of hospice care, ensuring clear and efficient exchange of critical information for decision-making and care planning.

Curriculum Alignment

WTCS Nursing Program Outcomes

- Integrate professional nursing identity reflecting integrity, responsibility, and nursing standards
- Communicate comprehensive information using multiple sources in nursing practice
- Integrate theoretical knowledge to support decision making
- Integrate the nursing process into patient care across diverse populations
- Function as a healthcare team member to provide safe and effective care

Nursing Fundamentals Course Competencies

- Maintain a safe, effective care environment for adults of all ages
- Adapt nursing practice to meet the needs of diverse patients in a variety of settings
- Use appropriate communication techniques
- Use the nursing process
- Provide nursing care for patients during end-of-life care

Nursing Pharmacology Course Competencies

- Apply components of the nursing process to the administration of cardiovascular and endocrine medications

Nursing Skills Course Competencies

- Perform a general survey assessment
- Use aseptic technique
- Administer medications via the enteral route
- Administer medications via the parenteral routes
- Perform modified assessments appropriate for a client at end of life

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Scenario Setup

Scene

Long Term Care Center, Time: 1700

Patient Information

- Middle-aged, Hispanic male
- Patient identification armband not present
- Patient Name: Hector Fernandez
- DOB: 09/6/19XX
- Age: 62
- Height: 157 cm (62 inches)
- Weight: 72 kg (160 lbs)
- Allergies: Shellfish
- Code Status: Full code
- Primary Language: Spanish
- No oxygen or IV access in place

Initial Sim Manager Settings

See the Acadicus Sim Manager Tutorial for more information. Use the default settings plus the following:

- Vitals: HR 50 BP 68/42 RR 8, Temp 38.4° C, SpO2 - 80% on RA
- Animation: Not Talking; Eyes Closed; Sad Expression, Lying Supine
- General Apparel and Equipment: Hospital gown
- Circulatory: Heart sounds normal, Pulses 2+; Capillary refill 2+
- Respiratory: Course Crackles (rhonchi), Agonal breathing
- Digestion and Abdomen: Absent Bowel Sounds
- Skin and Subcutaneous Tissue: Edema 4+ present in lower extremities; Pressure injury, stage 4 on left heel; Pale
- Nervous and Musculoskeletal: Eyes closed, sluggish eye response
- Cognition: Nonresponsive with pulse

Assets in VR Room

- Patient ID Band
- BP Cuff, Pulse Oximeter, Thermometer, Stethoscope
- Glucometer
- WOW cart with Medication cups, drinking glass and straw

Medications:

- Glycopyrrolate 0.2 mg subcutaneously every 4 hours PRN for management of secretions
- Morphine sulfate oral solution 4mg SL every 2 hours PRN for management of pain, respiratory distress (Concentration 10mg/5ml)
- Lorazepam 0.5mg SL every 4 hours PRN for management of severe anxiety, restlessness, or agitation in the terminal phase.
- Ondansetron 4mg ODT every 8 hours PRN for management of nausea and/or vomiting

EMR Chart Forms

- Provider Orders
- MAR

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State 1

Students are providing compassionate care to a patient in the active dying process. They are utilizing therapeutic communication skills to address the patient's concerns and ensure their comfort. Scheduled medications and treatments for end-of-life care are administered with care and sensitivity. Any new or unexpected assessment findings, including changes in the patient's condition, vital signs, or symptoms, are promptly communicated to the healthcare provider. This patient's care is centered on providing comfort and support during their final moments.

Events	Expected Student Behaviors	Prompts, Questions, Teaching Points
State 1: **Scenario Settings** • HR – 50 • BP – 68/42 RR 8 • Temp – 38.4° C SpO2 - 80% on RA • Lung Sounds – Rhonchi on expiration • Heart Sounds – regular rhythm **Technician Prompts** The patient is unconscious, diaphoretic, agonal breathing, occasional audible moaning, mottling to the knees, with family surrounding the bedside stating: • "I love you so much, and I'm here with you every step of the way.""You've been my rock and my love for all these years." • "Our memories together will live on forever in my heart." • "You're not alone, and I'll be holding your hand until the end." • "You've brought so much joy into my life, and I'm grateful for every moment." • "It's okay to let go; we'll meet again someday." • "You've been so strong; you can rest now." • "I'll cherish every moment we've had together." • "You mean the world to me, and I'll miss you more than words can express." • "I'm here to make sure you're comfortable and at peace." When/if the student calls the provider, orders can be adjusted according to student findings.	• Perform hand hygiene • Introduce themselves to the patient and family member • Perform appropriate end of life assessments while maintaining a calm, peaceful environment and providing comfort to the client • Communicate therapeutically with family members • Administer appropriate medications based on assessment • Notify the provider of time of death.	**Suggested Facilitator Questions:** • What information do you need to collect before administering medications? Why? • Analyze your assessment findings. How does this affect your medication administration? • Should any assessment findings be communicated to the provider? • How will you describe and document the client's edema? • What are helpful therapeutic techniques to use? • What information do you need to collect before completing any treatments? Why? • Analyze your assessment findings. How does this affect your treatment plan? • Should any assessment findings be communicated to the provider? • How will you describe and document the client's wound assessment? • What are helpful therapeutic techniques to use? **Questions Based on NCSBN CJMM:** **Recognizing Cues:** • What do you know about this patient? • How does the patient feel now? What is a priority to them? • What clinical cues did you recognize that require nurse follow-up? • What do the assessment findings mean in terms of physiological significance? • Is there any additional information you need to collect before administering medications? Why? **Analyze Cues:** • What problem is most likely? • What problem is most important to manage first?

		• Is there any additional clinical data needed to identify the priority problem? • Is the patient at risk for developing any complications? **Prioritize Hypotheses and Generate Solutions:** • What are the priority nursing problems for this patient at this time? • Should any assessment findings be communicated to the provider? **Taking Action/Implementing Interventions** • What intervention(s) is/are needed immediately? • Can any intervention(s) be safely delegated? (CNA/LPN) • What should be taught to the patient/family to promote health? • What medication(s) need to be administered to address the most important priority? • What information should be included in an SBAR report to the provider?

State 2: Evaluation

Students should reassess the client's status in approximately one hour (sim time).

Events	Expected Student Behaviors	Prompts, Questions, Teaching Points
• If the client administers furosemide, the client should have urinary output, followed by decreased edema and resolution of crackles in the lower lobes	• Evaluate for improvement • (optional) Document assessments and interventions using institution's EMR	**Evaluate:** • What findings indicate the interventions were effective (or not effective)? • Did the patient respond as expected? If not, what happened and why? • What were the critical decision-making points during this scenario? • When situations like this are encountered, you should first…then…then what next…?

Suggested Debriefing Questions

1. Encourage students to vent their emotional reactions: "How do you feel this scenario went?"
2. Use group discussion to facilitate the development of clinical judgment:[5,6,7,8,9,10]
    a. **Effective Noticing**
        i. **Focused observation:** What did you first notice about the client? What clinically significant cues did you recognize when you initially assessed the client?
        ii. **Recognizing deviations:** How was what you noticed different than expected?
        iii. **Seeking appropriate information:** What additional information did you need to know?
    b. **Effective Interpreting**
        i. **Prioritizing data:** What is the significance of the data you collected/noticed? What was this client's most important need? What priority nursing problems did you identify?
        ii. **Making sense of the data:** What issues are beginning to emerge? What evidence did you use to make a decision?
    c. **Effective Responding**
        i. What actions, if any, can be delegated to other health care team members?
        ii. What information should be communicated to the client?
        iii. What information should be communicated to the provider or other team members?
        iv. What nursing interventions should be implemented for this client?
        v. How should the client's response to interventions be monitored?
        vi. What nursing skills did you perform?
    d. **Effective Reflecting**
        i. Analyze your clinical performance. What decisions did you make? Why were those decisions made at that time? Were there alternative actions that should have been taken?
        ii. Were the nursing skills you performed accurate and efficient?
        iii. Identify strengths and weaknesses that occurred personally and among team members during this scenario. How do you plan on eliminating weaknesses to promote quality improvement?
3. Summarize/Identify Take away Points: "In this scenario you care for a patient with atypical chest pain."
    a. **Thinking-In-Action:** What were the critical decision points during this scenario?
    b. **Thinking-On-Action:** What would you do differently if you could repeat this scenario? Name 3 things you learned from this scenario that you will include in your future nursing practice.
    c. **Thinking-Beyond-Action:** How would you respond if Millie became increasingly short of breath with labored breathing during your assessment?

Survey

Please share this hyperlink with students or print this page and provide it to them.

Please complete a brief (2-3 minute) survey regarding your experience with this VR simulation. There are two options:

1. Copy and paste the following survey link into your browser: https://forms.gle/fM2HfhzyQ6qma2Mj8
2. Scan the QR code with your smartphone to access the survey

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Suggested Scenario Rubric *(based on Lasater's Clinical Judgment Rubric)*

Adapted from Tanner (2006), Lasater (2007), and Lasater (2011).[7,8,9,10,11,12]

Student Name: **Date:**

	4 (Exemplary)	3 (Accomplished)	2 (Developing)	1 (Beginner)
Effective Noticing Performs focused observation Recognizes deviation from expected patterns Seeks appropriate information	Focuses observation appropriately; regularly observes and monitors a wide variety of objective and subjective data to uncover any useful information. Recognizes subtle patterns and deviations from expected patterns in data and uses these to guide the assessment. Assertively seeks information to plan intervention; carefully collects useful subjective data from observing the client and from interacting with the client and family.	Regularly observes/monitors a variety of data, including both subjective and objective; most useful information is noticed but may miss the most subtle signs. Recognizes the most obvious patterns and deviations in data and uses these to continually assess. Actively seeks subjective information about the client's situation from the client and the family to support planning interventions; occasionally does not pursue important leads.	Attempts to monitor a variety of subjective and objective data, but is overwhelmed by the array of data; focuses on the most important data, missing some important information. Identifies obvious patterns and deviations, missing some important information; unsure how to continue the assessment. Makes limited efforts to seek additional information from the client/family; often seems not to know what information to seek and/or pursues unrelated information	Confused by the clinical situation and the amount/type of data; observation is not organized and important data is missed and/or assessment errors are made. Focuses on one thing at a time and misses most patterns/deviations from expectations; misses opportunities to refine the assessment. Is ineffective in seeking information; relies mostly on objective data; has difficulty interacting with the client and family and fails to collect important subjective data.
Effective Interpreting Prioritizes Data Makes Sense of Data	Focuses on the most relevant and important data useful for explaining the client's condition. Even when facing complex, conflicting, or confusing data, is able to (1) note and make sense of patterns in the client's data, (2) compare these with known patterns (from the nursing knowledge base, research, personal experience, and intuition), and 3) develop plans for interventions that can be justified in terms of their likelihood of success.	Generally focuses on the most important data and seeks further relevant information, but also may try to attend to less pertinent data. In most situations, interprets the client's data patterns and compares with known patterns to develop an intervention plan and accompanying rationale; the exceptions are rare or complicated cases where it is appropriate to seek the guidance of a specialist or more experienced nurse.	Makes an effort to prioritize data and focus on the most important, but also attends to less relevant/useful data. In simple or common/familiar situations, is able to compare the client's data patterns with those known and develop/explain intervention plans; has difficulty, however, with even moderately difficult data/situations that are within the expectations for students and inappropriately requires advice or assistance.	Has difficulty focusing and appears to not know which data are most important to the diagnosis; attempts to attend to all available data. Even in simple or familiar/common situations, has difficulty interpreting or making sense of data; has trouble distinguishing among competing explanations and appropriate interventions, requiring assistance both in diagnosing the problem and in developing the intervention.
Effective Responding Demonstrates a calm, confident manner Clearly communicates Performs well-planned interventions with flexibility Being Skillful	Assumes responsibility: delegates team assignments, assesses the client, and reassures them and their families. Communicates effectively; explains interventions; calms/reassures the clients and families; directs and involves team members, explaining and giving directions; checks for understanding. Tailors interventions for the individual client; monitors client progress closely and adjusts treatment as indicated by the client response. Shows mastery of necessary nursing skills.	Generally displays leadership and confidence, and is able to control/calm most situations; may show stress in particularly difficult or complex situations. Generally communicates well; explains carefully to clients, gives clear directions to the team; could be more effective in establishing rapport. Develops interventions based on relevant patient data; monitors progress regularly but does not expect to have to change treatments. Displays proficiency in most nursing skills; could improve speed or accuracy.	Is tentative in the leader role; reassures clients/families in routine and relatively simple situations, but becomes stressed and disorganized easily. Shows some communication ability (e.g., giving directions); communication with clients/families/team members is only partly successful; displays caring but not competence. Develops interventions based on the most obvious data; monitors progress, but is unable to make adjustments based on the patient response. Is hesitant or ineffective in using nursing skills.	Except in simple and routine situations, is stressed and disorganized, lacks control, making clients and families anxious/less able to cooperate. Has difficulty communicating; explanations are confusing, directions are unclear or contradictory, and clients/families are made confused/anxious, not reassured. Focuses on developing a single intervention addressing a likely solution, but it may be vague, confusing, and/or incomplete; some monitoring may occur. Is unable to select and/or perform nursing skills.
Effective Reflecting Evaluation/Self Analysis Commitment to Improvement	Independently evaluates/analyzes personal clinical performance, noting decision points, elaborating alternatives, and accurately evaluating choices against alternatives. Demonstrates commitment to ongoing improvement; reflects on and critically evaluates nursing experiences; accurately identifies strengths/weaknesses and develops specific plans to eliminate weaknesses.	Evaluates/analyzes personal clinical performance with minimal prompting, primarily major events/decisions; key decision points are identified and alternatives are considered. Demonstrates a desire to improve nursing performance; reflects on and evaluates experiences; identifies strengths/weaknesses; could be more systematic in evaluating weaknesses.	Even when prompted, briefly verbalizes the most obvious evaluations; has difficulty imagining alternative choices; is self-protective in evaluating personal choices. Demonstrates awareness of the need for ongoing improvement and makes some effort to learn from experience and improve performance but tends to states the obvious and needs external evaluation.	Even prompted evaluations are brief, cursory, and not used to improve performance; justifies personal decisions/choices without evaluating them. Appears uninterested in improving performance or unable to do so; rarely reflects; is uncritical of themself or overcritical (given level of development); is unable to see flaws or need for improvement.

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