SKILL FOCUS: Wound Care | DISCIPLINE: Nursing | LEVEL: 2

WOUND MANAGEMENT

Estimated Time: 30 minutes • Debriefing Time: 30 minutes

Patient Name: Clint D. Fullerton

SCENARIO OVERVIEW

Clint D. Fullerton is a 67 year old male who was admitted to the medical/surgical floor for treatment of a non-healing left ankle wound. Mr. Fullerton resides at a local skilled nursing facility secondary to self-care deficits and being a brittle diabetic. He had multiple rounds of antibiotic treatment with no successful results. Last night he developed foul smelling diarrhea.

CURRICULUM MAPPING

WTCS NURSING PROGRAM OUTCOMES

- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts
- Provide patient centered care by utilizing the nursing process across diverse populations and health care settings
- Minimize risk of harm to patients, members of the healthcare team and self through safe individual performance and participation in system effectiveness

BASIC SKILLS

- Provide wound care
- Administer medications via the enteral and parenteral routes
- Perform a basic physical assessment

NURSING FUNDAMENTALS

- Use appropriate communication techniques
- Use the nursing process
- Adapt nursing practice to meet the needs of diverse patients in a variety of settings
- Provide nursing care for patients with integumentary disorders
- Provide nursing care for patients with infection

PHARMACOLOGY

Apply components of the nursing process to the administration of antimicrobial drugs

HEALTH ALTERATIONS

- Plan nursing care for patients with alterations in the cardiovascular system
- Plan nursing care for patients with alterations in the endocrine system

LEARNING OBJECTIVE(S)

1. Complete a head to toe assessment
2. Complete a focused wound assessment and document findings
3. Recognize abnormal findings in assessments and diagnostics
4. Demonstrate proper medication administration: PO, subq and IVPB
5. Utilize appropriate therapeutic communication
6. Implement appropriate infection control practices

QR CODE

Scan to begin

SIMULATION LEARNING ENVIRONMENT & SET-UP

ENVIRONMENT

Inside room: Patient on bed
Inside or outside room: Hand sanitizer and sink (Will use both for scenario)
Outside room: Computer or form(s) for documentation, Medications

PATIENT PROFILE

Name: Clint D. Fullerton
DOB: 02/26/19XX
Age: 67
MR#: 0508
Gender: Male
Ht: 68 inches
Wt: 143 lbs (65 kg)
Admitting Diagnosis: wound, open, ankle (S91.00)
Medical History: Diabetes Mellitus (E11.9), HTN (I87.33), Venous Insufficiency (I87.2)
Code Status: Unknown
Ethnicity: Caucasian

Allergies: None

EQUIPMENT/SUPPLIES/SETTINGS

Patient

Hospital gown
Pad or chux placed under patient or adult brief on
No moulage
ID band with QR code
IV in left hand

Monitor Settings

Vitals: BP 188/98, P 108, RR 12, O2 99%, T 38.2C (100.8)

Supplies

General

- Phone
- Modified or CDiff precaution door sign
- Contact precaution cart/supplies

Medications

- Novolin R insulin vial
- Lantus insulin vial
- Insulin syringes
- Alcohol
- Lisinopril 20 mg PO
- IVPB Vancomycin 1625 mg in 100 ml 0.9%NS

IV pump

- 0.9% NaCl running at 75ml/hr

QR CODES

Start	Report	Patient
Patient ID	Leg	IV Site

TEACHING PLAN

STATE 1 – PREBRIEF, REPORT & PATIENT INTRODUCTION

The facilitator should lead this portion of the simulation. The following steps will guide you through State 1.

- "Scan to Begin" using scenario start QR Code while students are in Prebrief.
- "Meet Your Patient" (on iPad) and explain how the iPad works in the simulated learning environment including the scanner/QR codes.
- Discuss the simulation "Learning Objective(s)" (on iPad) as well as any other Prebrief materials
- Get "Report" (on iPad)
    - Possible facilitator discussion questions
        - Based on report, what medical history is pertinent to this patient's wound's non-healing status? Why?
        - What are your clinical concerns based on report?
        - What focused assessments do you plan to complete?
- Play the "Patient" video (on iPad)
- Advance to the "Patient Profile" screen (on iPad). This will act as a simulated patient chart.
- Students can view the tabbed content on the iPad (see below) prior to entering the patient's room and throughout the simulation as needed.
- Now, students can enter the room and begin the next state of the simulation.

HISTORY AND PHYSICAL

Name: Clint D. Fullerton

MR#: 0508
DOB: 02/26/19XX

DATE OF ADMISSION: 09/18/XX

CHIEF COMPLAINT: Ulceration Left Lower leg

HISTORY OF PRESENT ILLNESS: This is a 67-year-old male who resides at a local skilled nursing facility due to self-care deficits. He has a stage 2 ulceration on his left medial lower leg superior to ankle. He has been previously treated by Dr. Paulson who ordered multiple rounds of antibiotic treatment with no successful results. He is a brittle diabetic with his last HgbA1c being 9.2%.

PAST MEDICAL HISTORY: History of diabetes, HTN, venous insufficiency.

MEDICATIONS:

- Lisinopril 20mg PO daily
- Lantus insulin 0.2 units/kg/daily subcutaneously
- Novolin R insulin sliding scale subcutaneously with meals

ALLERGIES: None

SOCIAL HISTORY: Divorced; No children; Lived in LTC for 5 years. History of extensive alcohol use prior to LTC admission. Refuses to quantify current use but states LTC staff will take it away if they find it.

FAMILY HISTORY: Father - died in MVA at age 59. Mother – living, diabetic, age 91. Brothers – 2, status unknown.

REVIEW OF SYSTEMS:
Obtained From patient General: Current state of health described as fine.

Integument: Denies itching, dryness, rashes, pigmentation changes. Denies recent changes in birthmarks, moles, nails, or hair. Describes a sore above left ankle that has been present for several months. He has taken several antibiotics but it won't heal.

Lymph Nodes: Denies enlargement or tenderness

Head: Denies injury, change in level of consciousness, or headaches.

Eyes: Denies change in vision. Denies diplopia, eye pain, eye redness/inflammation. Denies glaucoma or cataracts. Wears glasses.

Ears: Denies hearing loss, change in acuity, tinnitis, vertigo, infection, or ear pain.

Nose: Denies sinusitis, nasal discharge or obstruction, post nasal drip, or epistaxis.

Mouth: Denies bleeding gums, mouth pain, oral cavity sores or growths, difficulty swallowing, sore throat, or hoarseness.

Respiratory: Denies excessive snoring, orthopnea, hemoptysis, productive cough, shortness of breath or wheezing. Denies history of pulmonary embolism, sleep apnea, bronchitis, pneumonia, recurrent infections or TB exposure. Denies occupational exposure to asbestosis or pneumoconiosis.

Cardiovascular: Denies chest pain or pressure. Denies palpitations or orthopnea. No history of murmur or valve disorder. History of hypertension for which he takes lisinopril.

Peripheral Vascular: Denies claudication, leg cramps, varicose veins, phlebitis, cramping. History of venous insufficiency and paresthesias in lower legs. States my legs get swollen every now and then, but it gets better when I sit in my recliner and put them up, and it used to feel like pins and needles in my feet but now I can't really feel my toes anymore.

Gastrointestinal: Denies change in appetite, weight gain/loss, abdominal pain, constipation, diarrhea, nausea or vomiting. Denies bloody or tarry stools. Denies change in bowel habits. Bowel movements occurring every 1-2 days. Denies history of colon polyps, hemorrhoids, liver problems, jaundice, or hepatitis. Denies symptoms of GERD.

Genitourinary: Denies dysuria, hematuria, hesitancy or change in stream. Denies history of infections or stone. Denies incontinence or nocturia.

Males: Denies history of hernias, testicular masses, prostatitis, STDs, or BPH. Denies current testicular pain, penile discharge/lesions or sexual dysfunction.

Musculoskeletal: Denies joint pain or stiffness. Normal ROM. Denies myalgias. No history of gout, osteopenia/ osteoporosis or osteoarthritis. Denies back pain. Denies history of compression fractures, broken bones, falls or amputations.

Hematopoietic: Denies easy bruising or bleeding. Denies anemia or prolonged bleeding. Denies history of previous transfusions or blood dyscrasias.

Endocrine: Denies polydipsia or polyuria. Denies heat or cold intolerance. Denies tremors. Denies history of thyroid disorder. History of diabetes for which he is taking Lantus and sliding scale regular insulin. Last HgbA1c was 9.2%.

Nervous System: Denies dizziness, syncope, vertigo, sensory or motor disturbances, tremor or weakness.

Psychiatric: Denies depression, anxiety, or panic attacks. Denies memory concerns. Denies history of mania. No recent personality changes. No history of previous psychiatric care.

LABORATORY AND DIAGNOSTIC STUDIES: Pending

ASSESSMENT: Ulceration, left lower leg.

RECOMMENDATIONS/PLAN: Admit to med/surg floor. Orders will include wound culture, wound nurse consult, and dietitian consult. I discussed with him the exact nature of the wound and his risk factors including diabetes management and personal hygiene. Patient will be continued on his medication regiment from long term care until his diabetic status can be reviewed. Wound treatment regimen will be determined once culture results are back. All questions were answered and he agreed with treatment plan.

Electronically Signed – Dr. Robert Bennett

ORDERS

<table>
<tr><th>Date</th><th>Time</th><th>Order</th></tr>
<tr><td>Yesterday</td><td>1800</td><td>Admit to Med Surg</td></tr>
<tr><td></td><td></td><td>Stool and Wound culture STAT</td></tr>
<tr><td></td><td></td><td>Diabetic Diet</td></tr>
<tr><td></td><td></td><td>Lisinopril 20mg PO daily</td></tr>
<tr><td></td><td></td><td>Saline lock flush 10mL IVP PRN</td></tr>
<tr><td></td><td></td><td>0.9% Normal Saline IV at 75mL/hr</td></tr>
<tr><td></td><td></td><td>Call if CDiff positive</td></tr>
<tr><td></td><td></td><td>Lantus insulin 13 units daily subcutaneously</td></tr>
<tr><td></td><td></td><td>Novolin R insulin Sliding Scale subcutaneously with meals:
<table>
<tr><th>Fingerstick glucose level (mg/dL)</th><th>Novolin R (units)</th></tr>
<tr><td>150-200</td><td>4</td></tr>
<tr><td>201-250</td><td>8</td></tr>
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<tr><td>351-400</td><td>20</td></tr>
</table></td></tr>
<tr><td></td><td></td><td>Wound care nurse consult</td></tr>
<tr><td></td><td></td><td>----------Dr. Robert Bennett</td></tr>
</table>

MAR

Patient Name: Clint Fullerton
DOB:02/26/19XX Weight(kg):65
MR#: 0508
Provider: Dr. Robert Bennett
Allergies: None

Order	Sch. Time	Dose
Lisinopril 20mg PO daily		
Lantus insulin 13 units daily subcutaneously		
0.9% Normal Saline IV at 75 mL/hour		
Saline lock flush 10mL IVP PRN		
Novolin R insulin Sliding Scale subcutaneously with meals:		

Fingerstick glucose level (mg/dL)	Novolin R (units)
150-200	4
201-250	8
251-300	12
301-350	16
351-400	20

VITALS

P 108
RR 12
BP 188/98
T 38.2C (100.8)
O2 99%
Pain: 3/10

PROGRESS NOTES

No reports available.

LAB/DIAGNOSTICS

Patient Name: Clint D. Fullerton

DOB: 02/26/19XX

MR#: 0508

Blood Glucose				
Date	Today		Units	Reference Range
Time	AM			
Glucose	210		mg/dL	Fasting 70 - 105

IMAGING

No reports available.

LEVEL UP

Option not available yet.

SCANNER

Used for students to scan QR codes during the simulation.

STATE 2 – PATIENT ASSESSMENT

- Patient Overview
  - Patient is sarcastic, angry and gruff. It is apparent that he is not fond of medical personnel or medical facilities, including the skilled nursing care facility where he currently resides.

- Learner Expected Behaviors
  - Perform appropriate infection control
  - Introduce themselves and verify patient
  - Communicate therapeutically
  - Perform general assessment
  - Perform focused assessment: leg wound (Scan Leg QR code)
  - Analyze the lab/diagnostic results
  - Recognize the need for contact precautions and implement them
  - Notify provider of positive Cdiff results – SBAR format

- Technician Prompts
  - Patient is sarcastic, angry and gruff.
  - Patient responses can include:
    - "I hate hospitals. I came in here with a little scratch and now I'm sick."
    - "I'm tired of answering questions. Just do what you have to do and get out."

- Facilitator Questions
  - Any concerns based on your assessment findings?
  - Analyze the vitals; any concerns?
  - What is C-diff? What causes it?
  - Prioritize what you will do first based on results.
  - What infection control precautions are required?

- Tabbed iPad content
  - After the student(s) scans the Leg QR code, the tabbed iPad content will change as follows (Students are not prompted to these changes):

LAB/DIAGNOSTICS

Patient Name: Clint D. Fullerton

DOB: 02/26/19XX

MR#: 0508

Blood Glucose				
Date	Today		Units	Reference Range
Time	AM			
Glucose	210		mg/dL	Fasting 70 - 105

Wound Culture				
Date	Today		Units	Reference Range
Time	AM			
Bacterial Growth	0			No growth

Stool Culture				
Date	Today		Units	Reference Range
Time	AM			
Clostridium difficile	Positive			Negative

LEVEL UP

This tab is now active.

When selected, students are asked: “Have you called the provider?”

Once they have selected “yes”, then the iPad moves to State 3 content as below.

STATE 3 – VANCOMYCIN ADMINISTRATION

- Patient Overview
  - Patient continues to be sarcastic, angry and gruff. He is clearly annoyed with the assessment, medications, etc. He begins to act worried about the C. Diff.

- Expected Student Behaviors
  - Perform appropriate infection control
  - Introduce themselves and verify patient
  - Communicate therapeutically
  - Review MAR and select correct medications
  - Notify pharmacy of Vancomycin order
  - Calculate Vancomycin dosage correctly
  - Scan the IV site QR code to assess site
  - Sets the pump and administers Vancomycin correctly

- Technician Prompts
  - Patient is sarcastic and gruff, but also worried about his future.
  - Patient responses can include:
  - "Now what do you want? I'm fine."
  - "What's going on?"
  - "I'm never getting out of here, am I?"

- Facilitator Questions
  - How will you respond therapeutically to patient's concerns as well as educate him about the required infection control precautions?
  - Differentiate between Lantus and Novolin R insulins.
  - What are you assessing at the IV site? What signs would indicate a complication is occurring?
  - Explain how you calculated the VTBI and Duration settings.
  - Why must soap and water be used for patients with C diff?
  - What is the proper way to remove PPE?

- Tabbed iPad content
  - Changed tabbed content includes:

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<tr><td></td><td></td><td>Wound care nurse consult</td></tr>
<tr><td></td><td></td><td>----------Dr. Robert Bennett</td></tr>
<tr><td>Today</td><td>Now</td><td>Vancomycin 25 mg/kg IVPB over 1 hour x 1 dose</td></tr>
<tr><td></td><td></td><td>Vancomycin 15 mg/kg IVPB over 1 hour every 12 hours</td></tr>
<tr><td></td><td></td><td>Contact precautions</td></tr>
<tr><td></td><td></td><td>----------Dr. Robert Bennett</td></tr>
</table>

LEVEL UP

There is an “end the scenario” option available now. At the end of the simulation, direct students here to end the iPad application.

STATE 4 – DEBRIEF

Nothing needed from the iPad.

DEBRIEFING QUESTIONS

1. How did you feel this scenario went?

2. What were the main issues you had to deal with? What things did you do for your patient?

3. Review understanding of learning objective: wound assessment

4. What was noted about Mr. Fullerton's wound?
    a. What caused this wound?
    b. What are Mr. Fullerton's risk factors that may contribute to poor wound healing?
    c. What is the best type of dressing to use for this type of wound?

5. Review understanding of learning objective: therapeutic communication
    a. What concerns did you notice that Mr. Fullerton had about his condition and recovery process?
    b. How did you therapeutically address these concerns? How did that go?
    c. Is there anything you would change if you had a chance to "do over" with Mr. Fullerton?

6. Review understanding of learning objective: medication administration
    a. Differentiate between Lantus and Novolin R. Why are both types of insulin used for Mr. Fullerton?
    b. Sliding scale was ordered for Mr. Fullerton. How is this different from insulin ordered based on carbohydrate counting?
    c. Why is it important that blood sugar is tightly controlled for Mr. Fullerton?
    d. What was Vancomycin ordered for Mr. Fullerton?
    e. How is are peak/trough levels used with Vancomycin? How does this affect nursing administration of Vancomycin?
    f. When using the IV pump, explain the difference between a Primary and Secondary line.

7. Review understanding of learning objective: implement appropriate infection control practices
    a. What is Clostridium difficile and how is it caused?
    b. What isolation precautions need to be taken with Cdiff?
    c. How is PPE properly applied and removed?

8. Tie the scenario back to the nursing process in a large group discussion. Concept mapping can be used to facilitate discussion:
    a. List 3 priority nursing problems for Mr. Fullerton
    b. Create a patient goal for each nursing diagnosis.
    c. Discuss focused assessments for each nursing diagnosis.
    d. Discuss nursing interventions for each nursing diagnosis.
    e. Discuss how you would evaluate the outcomes for Mr. Fullerton based on the patient goals identified.
    f. Re-evaluate the simulation in terms of this nursing process; what was actually accomplished? What could be improved in the future?

9. Take Away Points
    a. Ask each student to share one thing they learned from participating in this scenario that they will take into their nursing practice.

(Note: Debriefing is based on INASCL Standards for Debriefing and NLN recommended Theory-Based Debriefing by Drierfurest.)

SURVEY

Print this page and provide to students.

Students, please complete a brief (2-3 minute) survey regarding your experience with this ARISE simulation. There are two options:

1. Use QR Code: Survey
    a. Note: You will need to download a QR Code reader/scanner onto your own device (smartphone or tablet). There are multiple free scanner apps available for both Android and Apple devices from the app store.
    b. This QR Code will not work in the ARIS app.

SURVEY

2. Copy and paste the following survey link into your browser.
    a. https://ircvtc.co1.qualtrics.com/SE/?SID=SV_6Mwfv98ShBfRnBX

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