

## SECTION I: SCENARIO OVERVIEW

<b>Scenario Title:</b>	Emergency Department: Unfolding Urosepsis
Original Scenario Developer(s):	Jaime Hannans, PhD, RN, CNE, Colleen Nevins, DNP, RN, CNE
Date - original scenario	04/24/2012
Validation:	09/05/2016 Marjorie Miller, MA, RN, CHSE
Revision Dates:	02/05/2018
Pilot testing:	2012
QSEN revision:	2016; 2018
<u>Estimated Scenario Time:</u>	15 - 20 minutes per segment for total simulation time of 45 – 60 minutes
<u>Debriefing time:</u>	30 – 40 minutes
<u>Target group:</u>	Pre-licensure senior level nursing students; new graduates
<u>Core case:</u>	Urosepsis
<u>QSEN/IOM Competencies:</u>	
	<input type="checkbox"/> Patient-Centered Care
	<input type="checkbox"/> Evidence-based practice
	<input type="checkbox"/> Safety
	<input type="checkbox"/> Teamwork & Collaboration
<u>Brief Summary of Case:</u> <i>Patient is an elderly adult female brought in by ambulance after found lethargic and more confused than usual. Patient resides in a skilled nursing facility due to advanced dementia with inability to safely care for herself. Learners receive report from the Charge Nurse after Paramedics brought patient to the ER. Learners are expected to assess the patient and initiate interventions. The unfolding case allows for three groups of students to care for a patient undergoing workup and treatment for sepsis secondary to urinary tract infection, with a handoff report between each group including a final handoff to the medical surgical unit using SBAR. The simulation is designed as three segments to run continuously with debriefing as a group after all groups have viewed the video recording. This scenario is appropriate for advanced medical-surgical students or new graduates. Complexity can be enhanced by having the patient hemodynamically unstable requiring central line, vasopressors per sepsis protocol, and ICU care.</i>	

### EVIDENCE BASE / REFERENCES (APA Format)

Digby, R., Lee, S., and Williams, A. (2016). Nurse empathy and the care of people with dementia. <i>Australian Journal of Advanced Nursing</i> , 34(1), 52-59.
Dreger, N. M., Degener, S., Ahmed-Nejad, P., Wobker, G. & Roth, S. (2016). Urosepsis – Etiology, diagnosis and treatment. <i>Deutsches Aerzteblatt International</i> , 112(49), 837-848.
Maclay, T. and Rephann, A. (2017). The impact of early identification and critical care-based sepsis response team on sepsis outcomes. <i>Critical Care Nurse</i> , 37(6), 88-91.
Peach, B. C., Garvan, G. J., Garvan, C. S. & Cimiotti, J.P. (2016). Risk factors for urosepsis in older adults: A systematic review. <i>Gerontology &amp; Geriatric Medicine</i> , 2, 1-7.
Joint Commission Center for Transforming Healthcare. (n.d.). <i>Targeted initiatives: Reducing sepsis mortality</i> . Retrieved: <a href="http://www.centerfortransforminghealthcare.org/projects/detail.aspx? 7/8/16">http://www.centerfortransforminghealthcare.org/projects/detail.aspx? 7/8/16</a>
Society of Critical Care Medicine. (n.d.). <i>Surviving sepsis campaign: Guidelines</i> . Retrieved from <a href="http://www.survivingsepsis.org/Guidelines/Pages/default.aspx">http://www.survivingsepsis.org/Guidelines/Pages/default.aspx</a> July 8, 2016.

## SECTION II: CURRICULUM INTEGRATION

### A. SCENARIO LEARNING OBJECTIVES

#### Learning Outcomes

1. Apply clinical decision-making skills in interpreting and analyzing complex data
2. Prioritize interventions based on accurate interpretation of assessment data and patient history data
3. Provide care to patient utilizing principles of safety
4. Recognize findings, care, and history needed to give an accurate SBAR report for hand-off

#### Specific Learning Objectives

1. Demonstrate accurate focused patient assessment specifically addressing neurological, respiratory, cardiovascular and renal systems
2. Identify and interpret significant assessment findings in a patient newly arrived into the ED
3. Accurately prioritize immediate interventions required for a patient with signs and symptoms of early or severe sepsis or Systemic Inflammatory Response Syndrome (SIRS)
4. Intervene and use resources appropriately (team members, Charge Nurse, physician)
5. Reassess after each intervention to evaluate effectiveness
6. Communicate effectively using therapeutic and professional techniques
7. Assess and interpret diagnostics and lab results when available

#### Critical Learner Actions

1. Patient safety: Universal precaution, fall risk, 6 rights of medication administration, aseptic technique with IV medications, sterile technique with foley insertion
2. Perform accurate assessment with focus on areas of neurological, cardiovascular, respiratory, genito-urinary, renal, integumentary, and vital signs
3. Recognize abnormal & critical assessment findings, (altered mental status, fever, lab values, urine output)
4. Initiate continuous telemetry, vital signs and pulse oximetry monitoring
5. Differentiate between current infectious process and co-morbidity findings (sepsis, cardiovascular disease)
6. Reassure and reorient the patient using clear, calm statements and action
7. Prioritize and organize interventions based on assessment findings and clinical reasoning
8. Re-assess and evaluate patient following interventions, recognizing core measures for sepsis
9. Communicate assessment findings and critical results to the health care team

### B. PRE-SCENARIO LEARNER ACTIVITIES

#### Prerequisite Competencies

Knowledge	Skills/ Attitudes
<input type="checkbox"/> Nursing process	<input type="checkbox"/> General survey and head-to-toe assessment
<input type="checkbox"/> Dimension of patient-centered care with client with etiology of dementia	<input type="checkbox"/> Gerontology considerations in healthcare
<input type="checkbox"/> Pathophysiology of urosepsis	<input type="checkbox"/> Nursing interventions for sepsis/urosepsis
<input type="checkbox"/> National Patient Safety Goals	<input type="checkbox"/> Value active participation in plan of care
<input type="checkbox"/> Sepsis protocol	<input type="checkbox"/> Value the perspectives and expertise of all health team members
<input type="checkbox"/> Structured communication tool, i.e., SBAR	<input type="checkbox"/> Effective use of technology and standardized practices that support safety and quality

### SECTION III: SCENARIO SCRIPT

#### A. Case summary

86-year-old adult female found lethargic and more confused than usual upon waking in the morning. Patient has a history of advanced dementia and resides in a skilled nursing facility. Patient also has a history of heart failure, hypertension, atrial fibrillation, hypothyroidism, dementia, and arthritis. She has been confused and forgetful for the last two years but recognizes her children and caregivers. She was no longer able to care for herself at home a little over a year ago, so her adult son and daughter moved her to the skilled nursing facility for closer monitoring and assistance with ADLs. Her husband died 5 years ago. The patient is oriented to name only, mumbling incoherently, moaning, and becomes slightly restless. The patient also has diminished breath sounds and crackles in both bases of the lungs with no urine output, necessitating foley with return of 25 ml of dark amber urine testing positive for UTI. Patient is diagnosed with urosepsis in the ED, resulting in admission to the hospital.

#### B. Key contextual details

Patient is brought to the Emergency Department (ED) via ambulance at change of shift. Paramedics provide report to Charge Nurse that skilled nursing facility staff noticed patient had been increasingly lethargic for past 3 days. This morning the patient could not state her name, was significantly more confused than normal, and refused to eat or take her medications. Paramedics were able to start a peripheral IV after two attempts. Her son was notified by the skilled nursing staff of the patient’s transport to the ED and is reportedly on the way. The patient’s daughter has been involved in her care as well but lives out of state. ER physician available by phone. Assessment findings reveal signs of dehydration, heart failure, and sepsis secondary to urinary tract infection.

#### C. Scenario Cast

Patient/ Client	<input checked="" type="checkbox"/> High fidelity simulator	
	<input type="checkbox"/> Mid-level simulator	
	<input type="checkbox"/> Task trainer	
	<input type="checkbox"/> Hybrid (Blended simulator)	
	<input type="checkbox"/> Standardized patient	
Role	Brief Descriptor (Optional)	Standardized Participant (SP) or Learner (L)
Team Leader	Oversees and guides care; communicates with healthcare team	Learner
Primary Nurse	Assessment and evaluation of patient	Learner
Secondary Nurse	Interventions including medication review and administration	Learner
Charge Nurse/Physician	Available for support as needed	Faculty
Son &/or daughter-in-law	(optional; may omit this role)	Standardized Participant

D. Patient/Client Profile				
Last name:	Addison		First name:	Adele
Gender: Female	Age: 86	Ht: 5'2"	Wt: 60 kg	Code Status: DNR
Spiritual Practice: Jewish		Ethnicity: Caucasian		Primary Language spoken: English
1. Past history				
<p>Adele Addison is an 86-year-old female found lethargic and more confused than usual upon waking in the morning. Patient has a history of advanced dementia and resides in a skilled nursing facility. Patient arrived to the Emergency Department (ED) via ambulance at change of shift, after staff contacted the primary physician who directed staff to call 911. Paramedics provided report to Charge Nurse that patient had been increasingly lethargic and weak for past 3 days. This morning the patient could not state her name and was significantly more confused than normal. The staff stated the patient was unable to take her morning medications and refused to eat. The patient is found to be mumbling incoherently and moaning at times.</p> <p><b>Past Medical History:</b> Heart Failure, Hypertension, Atrial Fibrillation, Hypothyroidism, Dementia, and Arthritis</p>				
<b>Primary Medical Diagnosis</b>	Altered mental status			

2. Review of Systems	
CNS	A/O x 1 (person), PERLA, moves all extremities equal and weakly. Falls asleep often and is generally lethargic. Communication garbled and incoherent.
Cardiovascular	Atrial fibrillation @ 95 – 110; no murmurs, thrills or ectopy
Pulmonary	RR 22 – 28; O2 sat 90 – 92% on RA; lungs diminished bilaterally with crackles in lower lobes bilaterally. No noted history of smoking.
Renal/Hepatic	No hepatomegaly; Incontinent, diapered – no urine in diaper
Gastrointestinal	Abdomen round, soft; bowel sounds present
Endocrine	No noted history
Heme/Coag	WNL
Musculoskeletal	Generalized weakness
Integument	Skin dry, warm and intact; poor skin turgor; mucous membranes dry
Developmental Hx	Normal for age
Psychiatric Hx	Dementia
Social Hx	Widowed 5 years ago; 2 adult children – son in area, daughter out of state
Alternative/ Complementary Medicine Hx	None known

Medication allergies:	Sulfa	Reaction:	Body rash
Food/other allergies:	NKFA	Reaction:	N/A

*See next page for list of medications*

3. Home medications	Drug	Dose	Route	Frequency
	ASA	162 mg	Po	Daily
	Furosemide	40 mg	Po	Daily (morning)
	Lisinopril	5 mg	Po	Daily
	Lopressor	12.5 mg	Po	BID
	Lipitor	20 mg	Po	Daily (evening)
	Namenda	10 mg	Po	BID
	Levothyroxine	50 mcg	Po	Daily
	Megace	20 mg	Po	Daily
	Amlodipine (Norvasc)	5 mg	Po	Daily
	Carvedilol (Coreg)	6.25 mg	Po	BID
	Vitamin C	500 mg	Po	Daily
	Calcium + Vitamin D	500mg + 500 IU	Po	Daily
	Zinc	66 mg	Po	Daily
	Quetiapine (Seroquel)	25 mg	Po	Bedtime
Olanzapine (Zyprexa)	2.5 mg	Po	Every 6 hours prn for agitation, not to exceed 4 doses in 24 hours	

4. Laboratory, Diagnostic Study Results					
Na: 147	K: 3.5	Cl: 100	HCO3: 24	BUN: 34	Cr: 2.1
Ca: 9.0	Mg: 1.9	Phos: 3.5	Glucose: 124	HgA1C:	
Hgb: 11.2	Hct: 32	Plt: 248,000	WBC: 21,000	ABO Blood Type: O Positive	
PT	PTT	INR 3.1	Troponin: <0.04	BNP:	
ABG-pH: 7.31	paO2: 75	paCO2: 44	HCO3/BE: 23	SaO2: 90%	
VDRL:	GBS:	Herpes:	HIV:		
CXR: Bilateral diffuse alveolar infiltrates bilaterally lower lobes; enlarged heart consistent w/ previous readings					
12 Lead EKG: Atrial Fibrillation					
UA: Cloudy, dark amber; 4+ bacteria; positive for protein, blood, white blood cells					

**E. Baseline Simulator/Standardized Patient State**  
(This may vary from the baseline data provided to learners)

1. Initial physical appearance			
Gender: Female		Attire: Patient Gown	
Alterations in appearance (moulage): Elderly female with white hair, pale			
√	ID band present, accurate	ID band present, inaccurate	ID band absent or not applicable
√	Allergy band present, accurate	Allergy band inaccurate	Allergy band absent or N/A

2. Initial Vital Signs Monitor display in simulation action room:					
No monitor display		Monitor on, but no data displayed		√	Monitor on, standard display
BP: 90 - 110/55-68	HR: 95 - 110	RR: 22 - 28	T: 101.4 oral		SpO <sup>2</sup> : 90 - 92%
CVP:	PAS:	PAD:	PCWP:		CO:
AIRWAY:	ETCO <sup>2</sup> :	FHR:			
Lungs: Sounds/mechanics	Left: Crackles	Right: Crackles	Diminished/decreased volume		
Heart:	Sounds:		S1S2, irregular		
	ECG rhythm:		Atrial Fibrillation		
Bowel sounds:	Hypoactive		Other:		

3. Initial Intravenous line set up						
√	<b>Saline lock #1</b>	Site: RA	20-22 g		IV patent (Y/N) Yes	
	<b>IV #1</b>	Site:	CVC	Fluid type:	Initial rate:	IV patent (Y/N)
	Main					
	Piggyback					
	<b>IV #2</b>	Site:		Fluid type:	Initial rate:	IV patent (Y/N)
	Main					
	Piggyback					

4. Initial Non-invasive monitors set up				
√	NIBP	√	ECG First lead: A-Fibrillation	ECG Second lead:
√	Pulse oximeter		Temp monitor/type	Other:

5. Initial Hemodynamic monitors set up			
A-line Site:		Catheter/tubing Patency (Y/N)	CVC Site: PAC Site:

6. Other monitors/devices			
Foley catheter	Amount:	Appearance of urine:	
Epidural catheter	Infusion pump:	Pump settings:	
Fetal Heart rate monitor/tocometer	Internal	External	

<b>Environment, Equipment, Essential props</b>							
Recommend standardized set ups for each commonly simulated environment							
<b>1. Scenario setting: (example: patient room, home, ED, lobby)</b>							
Emergency Department (ED) in room with ECG monitoring							

<b>2. Equipment, supplies, monitors</b>							
(In simulation action room or available in adjacent core storage rooms)							
√	Bedpan/ Urinal	√	Foley catheter kit	√	Straight cath. kit		Incentive spirometer
√	IV Infusion pump		Feeding pump		Pressure bag		Wall suction
	Nasogastric tube		ETT suction catheters		Oral suction catheters		Chest tube kit
	Defibrillator		Code Cart		12-lead ECG		Chest tube equip
	PCA infusion pump		Epidural pump		Central line Kit		Dressing Δ equip
√	IV fluid Type: Normal Saline 0.9%		IV fluid additives:		Blood products: _____ ABO Type: ____ # of units:__		

√	Nasal cannula		Face tent	√	Simple Face Mask	√	Non-rebreather mask
√	BVM/Ambu bag		Nebulizer tx kit	√	Flowmeters (extra supply)		

<b>4. Documentation and Order Forms</b>							
√	Provider orders	√	Med Admin Record	√	Hx & Physical	√	Lab Results
	Progress Notes		Graphic record		Anes/PACU record	√	ED Record
√	Med Recon.		Transfer orders		Standing orders		ICU flow sheet
√	Nurses' Notes	√	Dx test reports		Code Record		Prenatal record
	Actual medical record binder				Electronic Medical Record		

<b>5. Medications (to be available in sim action room)</b>							
#	Medication	Dosage	Route				
1	Normal Saline	1000 ml	IV	5	Xopenex	0.63 mg	HHN
2	Vancomycin	1000 mg	IVPB	6	Acetaminophen	325 mg	oral
3	Zosyn	3.375 Gm	IVPB				
4	NS with 20mEQ KCL	1000 ml	IV				

**CASE FLOW / TRIGGERS/ SCENARIO DEVELOPMENT STATES**

**Note:** This scenario involves 3 unfolding segments of care as each group provides care during the duration of the simulation. Each group will receive report and then report off as their segment of time ends, e.g., 15 minutes. Group 1 receives report from the Charge Nurse; groups 2 and 3 receive report through hand-off report from the previous group, ending with group 3 handing off with a telephone report to the Medical/Surgical unit nurse. It is recommended to video-record all 3 segments and allow participants to view the simulation in entirety prior to debriefing as a group.

**Initiation of Scenario: Report from Charge Nurse at 0700:** Adele Addison is an 86-year-old female from Sunnyvale Nursing Residence, a skilled nursing facility. The skilled nursing staff reported that she has been more confused, lethargic, and short of breath for the last 3 days. She refused to eat or take her medications this morning. The staff also reported that she was so lethargic that she was falling asleep and unable to answer questions, so they called her primary doctor and then 911. Paramedics did not have much additional information. Vital signs are stable, and an IV saline lock is located in the right forearm. The skilled nursing facility staff stated Mrs. Addison's son was called. I believe she is normally more alert and oriented to herself and family, but generally pleasantly confused due to the dementia. The ED physician has just written orders, so please assess the patient and initiate the orders. If you have any questions, please feel free to contact me.

STATE / PATIENT STATUS	DESIRED LEARNER ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p><b>1. Baseline</b> <b>LEARNER GROUP 1</b></p> <p>Patient appears to be sleeping in bed and moans in response to any interaction. She easily falls back to sleep. She will answer to her name and state birthdate with some prompting.</p> <p>HOB elevated 20 degrees</p>	<p><b>Operator:</b></p> <p>BP: 108/64; MAP 79 HR: 102 Atrial fibrillation RR: 24; O2 sat 88 – 90% Temp: 101.4 orally; 100.6 axillary; 102.5 rectally</p> <p>Oriented to name only Pulses palpable but weak Lung sounds: bilateral rales, decreased volume</p> <p>Skin warm, pale, dry Diaper dry</p> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>• Learner performs actions in 5 minutes</li> <li>• If actions not completed in 5 minutes: gradually ↓ BP and ↑HR</li> <li>• If HOB not ↑ in 5 min, ↓ O2 sat to 85%</li> </ul>	<p><b>Learner Actions</b></p> <ul style="list-style-type: none"> <li>• Wash hand, identify self, ID patient</li> <li>• Use universal precautions</li> <li>• Maintain side rails in up position</li> <li>• Elevate HOB to 45 degrees</li> <li>• Assess vital signs and evaluate telemetry</li> <li>• Initiate assessment</li> <li>• Reassure patient with clear, calm statements and reorient patient as needed</li> <li>• Evaluate ED orders</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>• The Joint Commission National Patient Safety Goals: Patient identification.</li> <li>• Rationale for universal precautions, assessing fall risk</li> <li>• Rationale for patient identification</li> <li>• Clinical reasoning in re-positioning</li> <li>• Therapeutic communication techniques and reasons for re-orientation in a confused patient with dementia</li> <li>• Signs of perfusion and assessment for hydration</li> <li>• Effective, therapeutic communication for elderly patient with dementia</li> </ul>

<p><b>2.</b></p> <p>Remains in current state</p>	<p><b>Operator:</b></p> <p>When HOB ↑ &gt; 20 degrees, ↑ O2 sat to 91%</p> <p>When/If oxygen applied, ↑ O2 sat to 95%</p> <p>BP 104/65; MAP 78 HR 110 in A fib RR 26 shallow</p> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>• Learner performs critical actions in 5 min</li> <li>• If IVF <u>not</u> given,             <ul style="list-style-type: none"> <li>○ ↑ HR to 126</li> <li>○ ↓BP 85/45</li> </ul> </li> <li>• If O2 <u>not</u> applied,             <ul style="list-style-type: none"> <li>○ ↑ RR 34</li> <li>○ ↓O2 sat 86%</li> </ul> </li> </ul>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>• Apply oxygen at 2 L/NC</li> <li>• Assess telemetry pattern</li> <li>• Assess IV saline lock; Initiate IVF - IV bolus of 1000 ml Normal Saline 0.9%</li> <li>• Communicate alterations in assessment findings with team</li> <li>• Per ED orders, call lab and radiology</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>• Clinical rationale for elevating HOB and oxygen</li> <li>• Reasons for early recognition of signs and symptoms of SIRS/sepsis</li> <li>• Rationale for fluid resuscitation and considerations related to age and heart failure</li> <li>• Clinical guidelines for fluid resuscitation in sepsis (30mL/kg of isotonic fluid)</li> <li>• QSEN competency: Teamwork and collaboration</li> <li>• Professional communication in calling other departments</li> </ul>
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STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p><b>3.</b></p> <p>Patient remains in current state of confusion, occasional moaning</p>	<p><b>Operator:</b></p> <p>Same parameters <i>(See lab/x-ray/CT results below)</i></p> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>• Learners perform critical actions in 5 min</li> <li>• If IVF bolus only given and maintenance rate <u>not</u> initiated,               <ul style="list-style-type: none"> <li>○ ↑ HR to 126</li> <li>○ ↓ BP 85/45</li> </ul> </li> <li>• If O2 <u>not</u> applied,               <ul style="list-style-type: none"> <li>○ ↑ RR 34 and</li> <li>○ ↓ O2 sat 86%</li> </ul> </li> </ul>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>• Re-evaluate patient response to IV fluid bolus by checking VS and performing a focused assessment, e.g., heart, lungs, skin, cardio-perfusion, neuro</li> <li>• Initiates maintenance rate of 100 mL/hour</li> <li>• Review and evaluate lab and radiology reports</li> <li>• Contacts ED physician regarding lab and radiology results</li> <li>• Consider second IV access</li> <li>• Provides hand off report using SBAR to next group</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>• Rationale for evaluation after interventions</li> <li>• Clinical reasoning and judgement in review of lab and radiology results: normal versus abnormal; are there early signs of infection and/or sepsis?</li> <li>• QSEN competency: Teamwork and collaboration – closed loop communication using SBAR</li> </ul>
<p><b>Lab &amp; Radiology results delivered electronically or hard copy:</b></p> <p><b>WBC 21,000, Hgb 11.2, Hct 32, Platelets 248,000</b></p> <p><b>Na 147, K 3.5, Cl 100, Glucose 124, BUN 34, Cr 2.1, Ca 9.0, Mag 1.9, Phos 3.5</b></p> <p><b>Troponin I &lt;0.04</b></p> <p><b>CXR: Bilateral diffuse alveolar infiltrates in right and left lower lobes; enlarged heart consistent with previous readings</b>  <b>CT Scan of Head: Negative</b></p>			

CHANGE GROUPS	LEARNER GROUP 2 ASSUMES CARE AFTER HAND-OFF FROM GROUP 1		
STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p><b>1. LEARNER GROUP 2</b> Patient appears to fall asleep easily, moaning.</p> <p>HOB elevated 45 degrees.</p> <p>IV fluids infusing and O2 at 2L via NC in place (from prior group – if not, group 2 needs to initiate).</p>	<p><b>Operator:</b> More lethargic/sleeping at times, moaning when aroused, restless, confused BP 113/69; MAP 83.7 HR 99 in atrial fib RR 26 shallow Temp 101.1 orally, 100.1 axillary, 102.1 rectally O2 sat 93 – 95% on O2; Pulses palpable but weak Lung sounds: bilateral rales, decreased volume Diaper dry</p> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>Learners perform critical actions in 5 minutes</li> </ul>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>Wash hand, ID self, ID patient</li> <li>Use universal precautions</li> <li>Side rails in ↑ position</li> <li>↑ HOB to 45 degrees</li> <li>Assess VS/ evaluate telemetry</li> <li>Initiate assessment</li> <li>Reassure patient with clear, calm statements</li> <li>Reorient patient as needed</li> <li>Initiates maintenance IVF if not already done</li> <li>Review/ evaluate lab(s)/ radiologic results</li> <li>Accept and prioritize orders</li> <li>Confirm blood cultures have been drawn before initiating IV antibiotics</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>The Joint Commission National Patient Safety Goals: Patient identification.</li> <li>Rationale for universal precautions, assessing fall risk</li> <li>Rationale for patient identification</li> <li>Clinical reasoning in re-positioning and IV fluids</li> <li>Therapeutic communication techniques and reasons for re-orientation in a confused patient with dementia</li> <li>QSEN competency: Evidence-based practice – rationale and basis for initiation of sepsis protocol: risk factors, lab values, <i>Surviving Sepsis Campaign</i></li> </ul>

<p><b>5.</b></p> <p>No change in status</p>	<p><b>Operator:</b></p> <p>Same parameters</p> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>Learners perform critical actions in 5 minutes</li> </ul>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>Calls lab department regarding stat lab draws</li> <li>Assesses patient ability to void; determines diaper dry and patient uncooperative; calls ED physician for straight catheterization order to obtain UA, C&amp;S</li> <li>Calls pharmacy for antibiotics</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>Protocol rationale for obtaining cultures prior to starting antibiotics</li> <li>Sterile technique and skill with insertion of foley catheterization</li> <li>QSEN competency: Teamwork &amp; Collaboration - interface with interprofessional personnel</li> </ul>
<div style="border: 1px solid black; padding: 10px;"> <p><b>If ED Physician, M. Caira, MD is called re urine and/or sputum specimen the following orders are given.</b></p> <ol style="list-style-type: none"> <li>straight cath for UA C&amp;S,</li> <li>if &lt; 100 or &gt; 200 ml of urine, insert foley</li> <li>hold sputum C&amp;S for now</li> </ol> </div>			

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p><b>6.</b></p> <p>Patient is more restless with increase confusion</p>	<p><b>Operator:</b></p> <p>Same parameters</p> <p><b>Urine:</b> return of 25 ml, dark amber in color</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><b>Lab Results delivered electronically or hard copy: Lactic Acid 2.1 mmol/L</b></p> </div> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>• Learners perform critical actions in 5 minutes</li> <li>• If antibiotic(s) started before labs drawn, lab personnel arrive to draw labs after start of administration</li> </ul>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>• Verifies all lab draws completed as ordered</li> <li>• Inserts foley using sterile technique, noting return of 25 ml dark amber urine</li> <li>• Obtains urine sample and send to lab marked for UA, C&amp;S</li> <li>• Re-evaluates patient: obtains VS, focused assessment</li> <li>• Administers Levofloxacin 500 mg IVPB</li> <li>• Call to physician regarding lactic acid result and urine output of 25 ml</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>• Rationale for foley insertion</li> <li>• Evaluation of fluid resuscitation in elderly with heart failure, e.g., I&amp;O, weight, disease disorders, assessment findings</li> <li>• Assessment findings used to determine diagnosis of sepsis</li> <li>• QSEN competency: Safety – 3 checks and 6 rights of medication administration; action, dosing, peak/trough monitoring, and adverse effects of Vancomycin</li> <li>• QSEN competency: Teamwork and collaboration – closed loop communication using SBAR</li> </ul>

CHANGE GROUPS	LEARNER GROUP 3 ASSUMES CARE AFTER HAND-OFF FROM GROUP 2		
STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p><b>7.</b> <b>LEARNER GROUP 3</b></p> <p>Sleeping but able to arouse. Answers to name and date of birth only with some prompting.</p> <p>HOB elevated 45 degrees. Oxygen on at 2L/NC</p>	<p><b>Operator:</b></p> <p>BP 115/62; MAP 79.7 HR 102, Atrial fibrillation RR 22 Temp: 102 orally; 101 axillary; 103.1 rectally O2 sat 94% on 2L/NC</p> <p>Skin warm, dry, pale</p> <p>Pulses palpable but weak Lung sounds: bilateral rales, decreased volume</p> <p>Foley to gravity with 25 ml of dark amber urine</p> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>Learners perform critical actions in 5 minutes</li> </ul>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>Wash hand, identify self, ID patient</li> <li>Use universal precautions</li> <li>Maintain side rails in up position</li> <li>Elevate HOB to 45 degrees if not already done</li> <li>Assess vital signs and evaluate telemetry</li> <li>Initiate assessment</li> <li>Reassure patient with clear, calm statements and reorient patient as needed</li> <li>Assess IV site and fluids</li> <li>Assess urine output</li> <li>Review and evaluate lab and radiology results</li> <li>Review physician orders and prioritize interventions</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>The Joint Commission National Patient Safety Goals: Patient identification.</li> <li>Rationale for universal precautions, assessing fall risk</li> <li>Rationale for patient identification</li> <li>Rationale for re-assessment</li> <li>Assessment findings related to consideration for additional organ involvement secondary to sepsis</li> <li>Therapeutic communication techniques and reasons for re-orientation in a confused patient with dementia</li> </ul>

<p><b>8.</b></p> <p>No change in status</p>	<p><b>Operator:</b></p> <p>Same parameters</p>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>• Recognition of admission orders</li> <li>• Call to MD regarding urine output, if not already done</li> <li>• Starts Zosyn 3.375 Gm IVPB infusion</li> <li>• Administers Acetaminophen rectally</li> </ul>	<p><b>Debriefing Points:</b></p> <ul style="list-style-type: none"> <li>• Importance of timely recognition and execution of orders related to patient outcomes</li> <li>• QSEN competency: Safety –             <ul style="list-style-type: none"> <li>○ 3 checks/ 6 rights of med administration;</li> <li>○ action, dosing and adverse effects of Zosyn and Acetaminophen</li> </ul> </li> </ul>
<p><b><u>Admission Orders from H. Gardner, MD</u></b></p> <p>Admit to Telemetry Unit; Dx Urosepsis, Heart Failure Allergy: Sulfa (full body rash) Advance Directive – DNR</p> <p><b><u>Orders:</u></b></p> <ol style="list-style-type: none"> <li>1. VS, I/O routine</li> <li>2. Call MD for MAP &lt;60, HR &lt;50 or &gt;120, RR &lt;10 or &gt;40</li> <li>3. Oxygen via NC or mask to maintain O<sub>2</sub> sat &gt;92%</li> <li>4. Daily weight</li> <li>5. NPO</li> <li>6. IV D5½NS w/20 KCl@ 125 mL/hr</li> <li>7. Foley to gravity; call MD for output &lt;30 mL/hr</li> <li>8. Levofloxacin 500 mg IVPB every 12 hours</li> <li>9. Zosyn 3.375 Gm. IVPB infused over 4 hours every 6 h</li> <li>10. Furosemide 20 mg IVP every 12 hours</li> <li>11. Xopenex 0.63 mg HHN every 6 h</li> <li>12. Acetaminophen 325 mg rectally every 4 h PRN T &gt;101 F pain or discomfort</li> <li>13. Hold all oral medications for now</li> <li>14. Blood cultures, Sputum C&amp;S, urine C&amp;S if not already done in ED</li> <li>15. CBC. CMP. PT. INR and chest x-rav in a.m.</li> </ol>		<p><b>Lab result:</b></p> <p><b>UA result positive for protein, blood, and white blood cells with 4+ bacteria</b></p>	
<p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>• Learners perform critical actions in 5 minutes</li> </ul>			

<p>9.</p> <p>No change in status</p>	<p><b>Operator:</b></p> <p>Same parameters</p> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li>Learners perform critical actions in 5 minutes</li> </ul>	<p><b>Learner Actions:</b></p> <ul style="list-style-type: none"> <li>Re-evaluates vital signs</li> <li>Call to medical/surgical unit providing hand-off report to receiving RN</li> </ul>	<p><b>Debriefing Points</b></p> <ul style="list-style-type: none"> <li>Rationale for re-assessment and evaluation after interventions</li> <li>QSEN competency: Teamwork and collaboration – closed loop communication using SBAR</li> </ul>
<p>Scenario End Point: 45 – 60 minutes</p>			
<p>Suggestions: Print or electronically load diagnostic results and physician orders</p> <p>Suggestions to <u>decrease</u> complexity: Simulate using only one segment of the scenario; Reduce patient co-morbidity by excluding heart failure and/or atrial fibrillation</p> <p>Suggestions to <u>increase</u> complexity: Patient exhibits signs of hemodynamic instability, e.g., MAP <math>\leq</math>60, decrease Hgb/Hct, fluid overload after bolus, and/or requiring central line, vasopressors per sepsis protocol, and ICU care. Repeat lactic acid could result higher at 3-5.</p>			

**APPENDIX A: HEALTH CARE PROVIDER ORDERS**

<b>Patient Name: Adele Addison</b>  <b>DOB: 4/1/xx</b>  <b>Age: 86</b>  <b>MR#: 001235</b>		<b>Diagnosis:</b>  <b>Altered mental status</b> <b>Dementia</b> <b>Heart Failure</b>
†Allergies & Sensitivities: Sulfa medication		
Date	Time	HEALTH CARE PROVIDER ORDERS AND SIGNATURE
x/xx/xx	0700	Unit: ED room #8 Diagnosis: Altered mental status; History of Dementia, Heart Failure, Hypertension, Atrial Fibrillation, Hypothyroidism, Arthritis Advanced Directives: Full code  1. Continuous pulse oximetry and telemonitoring 2. Notify MD of BP map below 60, HR > 120, RR > 40, Temp > 101 and O2 sat less than 90% 3. Apply O2 via NC or mask to maintain O2 sat above 92% 4. IV normal saline 1000 ml bolus now 5. IV normal saline 125 ml per hour 6. Labs: CBC, CMP, PT/INR, Troponin I, Lactic Acid, UA asap 7. Radiology: CT of Head without contrast STAT; Portable CXR STAT 8. EKG
<b>Signature</b>		<i>M. Cairra, MD</i>

<b>Patient Name: Adele Addison</b>  <b>DOB: 4/1/xx</b>  <b>Age: 86</b>  <b>MR#: 001235</b>		<b>Diagnosis:</b> <b>Urosepsis; Heart Failure</b>
†Allergies & Sensitivities: Sulfa medication		
Date	Time	HEALTH CARE PROVIDER ORDERS AND SIGNATURE
x/xx/xx	0925	Admission Orders to Unit: Telemetry Diagnosis: Urosepsis, Heart Failure Advanced Directives: DNR  1. VS, I/O routine 2. Call MD for MAP <60, HR <50 or >120, RR <10 or >40 3. Oxygen via NC or mask to maintain O <sub>2</sub> sat >92% 4. Daily weight 5. NPO 6. IV D5½NS w/20 KCl@ 125 mL/hr 7. Foley to gravity; call MD for output <30 mL/hr 8. Vancomycin 1000 mg IVPB every 12 hours 9. Zosyn 3.375 Gm. IVPB infused over 4 hours every 6 h 10. Furosemide 20 mg IVP every 12 hours 11. Xopenex 0.63 mg HHN every 6 h 12. Acetaminophen 325 mg rectally every 4 h PRN T >101 F pain or discomfort 13. Hold all oral medications for now 14. Blood cultures, Sputum C&S, urine C&S if not already done in ED 15. CBC, CMP, PT, INR and chest x-ray in a.m. 16. Repeat lactic acid q 4 hours until less than 2
Signature		<i>H. Gardner, MD</i>

APPENDIX B: Digital images of manikin and/or scenario milieu	
	<p><b>Insert digital photo here</b></p>
<p><b>Insert digital photo here</b></p>	<p><b>Insert digital photo here</b></p>

### APPENDIX C: DEBRIEFING GUIDE

General Debriefing Plan			
<input type="checkbox"/> Individual	<input checked="" type="checkbox"/> Group	<input checked="" type="checkbox"/> With Video	<input type="checkbox"/> Without Video
Debriefing Materials			
<input checked="" type="checkbox"/> Debriefing Guide	<input type="checkbox"/> Objectives	<input type="checkbox"/> Debriefing Points	<input type="checkbox"/> QSEN
QSEN Competencies to consider for debriefing scenarios			
<input checked="" type="checkbox"/> Patient Centered Care	<input checked="" type="checkbox"/> Teamwork/Collaboration	<input checked="" type="checkbox"/> Evidence-based Practice	
<input checked="" type="checkbox"/> Safety	<input type="checkbox"/> Quality Improvement	<input type="checkbox"/> Informatics	
Sample Questions for Debriefing			
<ol style="list-style-type: none"> <li>1. How did the experience of caring for this patient feel for you and the team?</li> <li>2. Have you had a similar experience to this before? If so, can you share that experience?</li> <li>3. What GAPS did you identify in your own knowledge base and/or preparation for the simulation experience?</li> <li>4. The main objective of the simulation was to learn about recognizing signs of sepsis, specifically urosepsis, and appropriate intervention including dealing with a geriatric patient with dementia.               <ol style="list-style-type: none"> <li>a. With that in mind, can you identify aspects of your nursing care where you addressed the objectives?</li> <li>b. Are there any aspects of your care that you would handle differently if you could?</li> </ol> </li> <li>5. What risk factors did the patient have that pre-disposed her to sepsis/urosepsis? Discuss differentiation between source of infection with history of heart failure and dementia.</li> <li>6. Can you identify the earmarked findings suggesting sepsis, e.g., <i>Surviving Sepsis Campaign</i>? Which signs and symptoms did the patient present?</li> <li>7. Discuss the protocols for recognition, diagnostics, and treatment of sepsis, including rationale.</li> <li>8. Discuss the rationale for each of the following orders               <ol style="list-style-type: none"> <li>a. IV fluid bolus of 500 ml NS</li> <li>b. Maintenance IV of NS with change to D5 ½ NS+20 mEq KCL at 123 ml/hour</li> <li>c. Vancomycin 1000 mg</li> <li>d. Zosyn 3.375 GM</li> <li>e. Furosemide 20 mg IV</li> <li>f. Acetaminophen 325 mg rectally</li> </ol> </li> <li>9. How did each of the QSEN competencies for patient-centered care, evidence-based practice, safety, and teamwork &amp; collaboration impact your care of the patient?</li> </ol>			
<b>Notes for future sessions:</b>			