



California Simulation Alliance (CSA) Simulation Scenario Template

The California Simulation Alliance (CSA) is comprised of simulation users from all disciplines from throughout the state. Several regional collaboratives have formed totaling 7 as of March, 2011: The Rural North Area Simulation Collaborative (RNASC), the Capital Area Simulation Collaborative (CASC), the Bay Area Simulation Collaborative (BASC), the Central Valley Simulation Collaborative (CVSC), the Southern California Simulation Collaborative (SCSC), the Inland Empire Simulation Collaborative (IESC), and the San Diego Simulation Collaborative (SDSC). The CINHC, a non-profit organization focused on workforce development in healthcare provides leadership for the CSA.

The purpose of the California Simulation Alliance (CSA) is to become a cohesive voice for simulation in healthcare education in the state, to provide for inter-organizational research on simulation, to disseminate information to stakeholders, to create a common language for simulation, and to provide simulation educational courses. The goals of the alliance will include providing a home within the CINHC for best practice identification, information sharing, faculty development, equipment/vendor pricing agreements, scenario development, sharing and partnership models. More information can be found on the CSA website at www.californiasimulationalliance.org

All scenarios have been validated by subject matter experts, pilot tested and approved by the CSA before they were published online. All scenarios are the property of the CINHC/CSA. The writers have agreed to release authorship and waive any and all of their individual intellectual property (I.P.) rights surrounding all scenarios. I.P release forms can be found at www.bayareanrc.org/rsc and click documents. (Please send signed I.P. release forms to KT at kt@cinhc.org)

SECTION I SCENARIO OVERVIEW

- A. Title**
- B. Summary**
- C. Evidence Base**

TABLE OF CONTENTS

SECTION II CURRICULUM INTEGRATION

- A. Learning Objectives
 - 1. Primary
 - 2. Secondary
 - 3. Critical Elements
- B. Pre-scenario learner activities

SECTION III SCENARIO SCRIPT

- A. Case Summary
- B. Key Contextual Details
- C. Scenario Cast
- D. Patient/Client Profile
- E. Baseline patient/client simulator state
- F. Environment / equipment / essential props
- G. Case flow /triggers / scenario development

SECTION IV APPENDICES

- A. Health Care Provider Orders
- B. Digital Images of Manikin / Milieu
- C. Debriefing Guide

SECTION I: SCENARIO OVERVIEW

Scenario Title:	Adult Med-Surg: Sepsis early recognition_QSEN		
Original Scenario Developer(s):	D. Sepulveda, H. Traxler, V. Udeozor		
Date - original scenario	9-15-10		
Validation:	C.O'Leary-Kelley		
Pilot testing:	11-14-11 S. Paletz; D. Sauz; LA City College		
Revisions:	12-20-11, C. O'Leary-Kelley, PhD, RN, CNE 12-15-14, Melissa Punnoose, MSN, RN-BC, CHSE; Heidi Traxler, MSN, RN, CHSE, Marjorie Miller, MA, RN, CHSE		
Estimated Scenario Time: 20 minutes Debriefing time: 40 minutes			
<u>Target group:</u> Transition to Practice RNs; new grads			
<u>Core case:</u> Change in condition – recognition early sepsis			
<u>Brief Summary of Case:</u> 78-year-old widower with a 2-year history of Alzheimer's disease, HTN, Type 2 DM. Admitted at 2300 last night status post fall in assisted living center. X-rays are all negative for fx, but head CT revealed small subdural hematoma. He is a/o to person and place, which is his baseline. He is not participating in self-care activities. Learners receive handoff report and use SBAR to obtain orders to manage his signs of early sepsis.			
<u>QSEN Competencies</u>			
X Patient Centered Care			
X Patient Safety			
<input type="checkbox"/> Quality Improvement			
X Teamwork and Collaboration			

EVIDENCE BASE / REFERENCES (APA Format)

Ackley, B., Ladwig, G., 2013. Nursing Diagnosis Handbook. An Evidenced-Based Guide to Planning Care. (10 th ed.) Mosby Elsevier, St. Louis, Missouri.
Seckel, MA (2014). Nursing management: Shock, systemic inflammatory response syndrome, and multiple organ dysfunction syndrome. In Dirksen, L, and Bucher, H. (Eds.) Medical-Surgical Nursing: Assessment and management of clinical problems (9 th ed.), (pp. 1631-1653), St. Louis, Missouri: Mosby
Surviving Sepsis Campaign Guidelines.(2012) Retrieved from http://www.sccm.org/Documents/SSC-Guidelines.pdf
The Joint Commission. (2014). 2014 Hospital National Patient Safety Goals. Retrieved from http://www.jointcommission.org/hap_2014_npsgs/#

SECTION II: CURRICULUM INTEGRATION**A. SCENARIO LEARNING OBJECTIVES**

Learning Outcomes
1. Provides evidence based care for the patient in early sepsis
2. Prioritizes assessment and interventions according to patient needs
3. Communicates with team members using SBAR and closed loop communication
Specific Learning Objectives
1. Applies principles of hand hygiene, infection control and personal protection.
2. Conducts focused assessment and identifies changes from report.
3. Recognizes acute changes and identifies signs and symptoms of SIRS/sepsis
4. Initiates appropriate and timely interventions to improve patients status
5. Utilizes SBAR communication when speaking with team and physician
6. Demonstrates teamwork and communication throughout a stressful situation.
Critical Learner Actions
1. Perform hand hygiene; introduce self and role and correctly identify patient w/ 2 identifiers
2. Assessment of patient environment and equipment; call light, bed, side rails, suction available, O2 manometer available, bedside table close, personal belongings safe
3. Follows fall precautions per agency/organization protocol
4. Rapid focused assessment of LOC, O2 sat, RR rate and effort, skin color/temperature, VSX5, breath sounds
5. Identify acute changes in patient status: VS: decreased O2sats, BP and temp; increased HR and confusion
6. Call for help and repeat if no response from first call
7. Apply oxygen via NC or facemask
8. Use SBAR to inform RRT and all arriving health care providers of pt status
9. Use Call Out to direct arriving health care providers of specific tasks
10. Gather relevant patient information prior to calling MD call
11. Uses SBAR to communicate to MD
12. Utilize therapeutic communication with patient and significant others

B. PRE-SCENARIO LEARNER ACTIVITIES

Prerequisite Competencies	
Knowledge	Skills/ Attitudes
<input type="checkbox"/> Pathophysiology of sepsis	<input type="checkbox"/> Focused neuro/resp physical assessment skills
<input type="checkbox"/> Nursing role in early sepsis screening	<input type="checkbox"/> Significance of abnormal clinical findings
<input type="checkbox"/> Current National Patient Safety Goals	<input type="checkbox"/> Therapeutic communication in acute situations
<input type="checkbox"/> Structured Communication Tools (SBAR)	<input type="checkbox"/> Request for assistance in escalating situations
<input type="checkbox"/> Legal aspects of taking telephone orders	<input type="checkbox"/> Competent application of airway adjuncts
<input type="checkbox"/>	<input type="checkbox"/>

SECTION III: SCENARIO SCRIPT

CSA REV template (12/15/08; 5/09; 12/09; 4/11, 12/14)

ALL DATA IN THIS SCENARIO IS FICTICIOUS

A. Case summary

78-year-old male with history of Alzheimer' disease, HTN, and Type 2 DM. Admitted at 2300 last night status post fall in assisted living center. He has a bruise to the R hip and several small bruises and scrapes. Head CT showed small subdural hematoma, which is why he was admitted. Currently he is a/o to person and place, which is his baseline. He does not actively participate in self-care.

Most recent vitals were: 104/68, 79, 18, 96% RA Pain 1/10. He has Vicodin available for pain.

B. Key contextual details

Change of shift report (night to day) on a med surg unit. RN enters room to conduct focused assessment. Patient lying quietly with eyes closed.

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)	Confederate/Actor (C/A) or Learner (L)
Primary RN		Learner
Secondary RN	Will enter room if called by RN	Learner
RRT RN/Charge RN	Will enter room if called by RN	Learner (if experienced RN) or C
"Ruth"	SO from assisted living center is visiting	Learner or Actor

D. Patient/Client Profile			
Last name:	Fisher	First name:	Greg
Gender: Male	Age: 78	Ht: 6'	Wt: 170 lbs
			Code Status: DNR
Spiritual Practice: Catholic	Ethnicity: Caucasian		Primary Language spoken: English
1. Past history			
Transferred to medical-surgical unit from ED at 2300 after a recent fall and change in LOC at the assisted living center. CT revealed small subdural hematoma. The patient has recently had decreased involvement in self-care/altered LOC at the assisted living center. VS at 0400: 130/82, 82, 16, 97.5F, 96% on RA. Slept off and on after admission from ED.			
Primary Medical Diagnosis	Subdural hematoma		

2. Review of Systems	
CNS	Oriented x 2; Confused language at times; speech clear. GCS 13 subdural hematoma
Cardiovascular	Regular rhythm without murmur; hx of HTN controlled BP 102/64
Pulmonary	Breath sounds shallow, diminished. Non-productive cough.
Renal/Hepatic	
Gastrointestinal	Abd soft; non-distended non-tender. Active BS 4 quadrants. Heme neg stool
Endocrine	Type II diabetes x 10 years; daily Glucophage; BG 120
Heme/Coag	CBC within normal limits; WBC elevated
Musculoskeletal	L arm forearm fracture. Small ecchymosis to R hip
Integument	Intact no lesions
Developmental Hx	Normal male genitalia
Psychiatric Hx	History of early Alzheimer's x 2 years
Social Hx	Widowed x 5 years; lives in assisted living center
Alternative/ Complementary Medicine Hx	none

Medication allergies:	NKDA	Reaction:	
Food/other allergies:	No allergies	Reaction:	

3. Current medications	Drug	Dose	Route	Frequency
	Atenolol	50 mg	PO	Daily
	Glucophage	1000 mg	PO	Daily
	Aricept	5 mg	PO	QHS
	Lisinopril	40 mg	PO	Daily
	Hydrochlorothiazide	25 mg	PO	Daily

4. Laboratory, Diagnostic Study Results					
Na: 142	K: 4.2	Cl: 101	HCO ₃ : 20	BUN: 22	Cr: 1.6
Ca:	Mg: 2.2	Phos:	Glucose: 155	HgA1C: 7.0	
Hgb: 10.9	Hct: 39.3	Plt: 167,000	WBC: 11	ABO Blood Type:	
PT 30.7	PTT 55.3	INR 1.9	Troponin:	BNP:	
ABG-pH: 7.30	paO ₂ : 62	paCO ₂ : 52	HCO ₃ /BE: 20/-6	SaO ₂ : 92.3%	
VDRL:	GBS:	Herpes:	HIV:		
CXR:	ECG: NSR	Head CT: small subdural hematoma			

E. Baseline Simulator/Standardized Patient State (This may vary from the baseline data provided to learners)			
1. Initial physical appearance			
Gender: male		Attire: hospital gown	
<u>Alterations in appearance (moulage):</u> Sling to L arm			
X	ID band present, accurate	ID band present, inaccurate	ID band absent or not applicable
	Allergy band present, accurate	Allergy band inaccurate	x Allergy band absent or N/A

2. Initial Vital Signs Monitor display in simulation action room:					
No monitor display		X Monitor on, but no data displayed		Monitor on, data displayed	
BP: 100/60	HR: 110	RR: 18	T: 96.9 oral	SpO ₂ : 92%	
CVP:	PAS:	PAD:	PCWP:	CO:	
AIRWAY:	ETCO ₂ :	FHR:			
Lungs: Sounds/mechanics	Left: decreased breath sounds	Right:			
Heart:	Sounds: S1, S2 normal				
	ECG rhythm:				
	Other:				
Bowel sounds:				Other:	

3. Initial Intravenous line set up					
X	Saline lock #1	Site:		X	IV patent (Y/N)
	IV #1	Site:		Fluid type:	Initial rate:
	Main	RA		D5 ½ NS w/20mEq KCL	125ml/hour
	Piggyback				IV patent (Y/N)
	IV #2	Site:		Fluid type:	Initial rate:
	Main	RA			IV patent (Y/N)
	Piggyback				
4. Initial Non-invasive monitors set up					
X	NIBP			ECG First lead:	ECG Second lead:
X	Pulse oximeter	X		Temp monitor/type	Other:
5. Initial Hemodynamic monitors set up					
	A-line Site:			Catheter/tubing Patency (Y/N)	CVP Site: PAC Site:
6. Other monitors/devices					
	Foley catheter		Amount:	Appearance of urine:	
	Epidural catheter			Infusion pump:	Pump settings:
					.
Environment, Equipment, Essential props					
1. Scenario setting: (example: patient room, home, ED, lobby)					
Normal hospital room; 3 side rails up					

2. Equipment, supplies, monitors (In simulation action room or available in adjacent core storage rooms)					
	Bedpan/ Urinal		Foley catheter kit	Straight cath. kit	Incentive spirometer
X	IV Infusion pump		Feeding pump	Pressure bag	X Wall suction
	Nasogastric tube		ETT suction catheters	Oral suction catheters	Chest tube kit
	Defibrillator	X	Code Cart	12-lead ECG	Chest tube equip
	PCA infusion pump		Epidural infusion pump	Central line Insertion Kit	Dressing Δ equipment
	IV fluid Type:		IV fluid additives:	IV Piggy back	Blood product ABO Type: # of units:

3. Respiratory therapy equipment/devices						
X	Nasal cannula		Face tent	X	Simple Face Mask	X Non re-breather mask
X	BVM/Ambu bag		Nebulizer tx kit		Flow meters (extra supply)	

4. Documentation and Order Forms						
X	Health Care Provider orders		Med Admin Record	X	H & P	X Lab Results
X	Progress Notes		Graphic record		Anesthesia/PACU record	ED Record
	Medication reconciliation		Transfer orders		Standing (protocol) orders	ICU flow sheet
	Nurses' Notes		Dx test reports		Code Record	Prenatal record
X	Actual medical record binder, constructed per institutional guidelines				Other Describe:	

5. Medications (to be available in sim action room)								
#	Medication	Dosage	Route		#	Medication	Dosage	Route

CASE FLOW / TRIGGERS/ SCENARIO DEVELOPMENT STATES

Initiation of Scenario : Greg Fisher is a 78-year-old male with history of Alzheimer' disease, HTN, and Type 2 DM. Admitted at 2300 last night for a small subdural hematoma from a fall at his assisted living community. Currently he is a/o to person and place, which is his baseline. Neuro checks are due Q4 hours and have been stable. He does not actively participate in self-care.

Most recent vitals were: 124/68, 79, 18, 96% RA Pain 1/10. He has Vicodin available for pain.

STATE / PATIENT STATUS	DESIRED LEARNER ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p>1. Baseline</p> <p>HOB elevated 30 degrees Side rails up x 3 Patient is alert. Oriented to name only. Thinks he is at home.</p> <p>Female friend walks in during initial safety assessment. She is very concerned and has several questions regarding Greg and his care</p>	<p>Operator</p> <p>BP 100/60 P 96 RR 22 T 96.9 O₂ Sat 95% No pain</p> <p>BS clear, diminished in bases.</p> <p>Triggers: Change in VS</p>	<p>Learner Actions</p> <ol style="list-style-type: none"> 1. Wash hands. 2. Introduce self. 3. Identify patient. 4. Assess patient safety 5. Perform focused assessment. 6. Use an evidence-based approach for assessment of the patient with a head injury who has vital sign changes. 7. Communicates/reassures female friend 8. Recognize change in condition 	<p>Debriefing Points:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Strategies for complying with NPSG's in acute situations <input type="checkbox"/> Differentiation of diagnostic criteria for early sepsis vs patient's multiple medical problems <input type="checkbox"/> safety assessment <input type="checkbox"/> addressing family member concerns

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p>2.</p> <p>Patient continues to be confused. Insists he is at home and needs to get ready for work. Female friend insists that he is not normally this confused.</p>	<p>Operator:</p> <p>Neuro unchanged</p> <p>BP 98/58 P 100 RR 22 O₂ Sat 95% T 96.5</p> <p>Triggers: If no call to MD then patient will become more confused and vitals will slowly deteriorate.</p>	<p>Learner Actions:</p> <ol style="list-style-type: none"> 1. Continual reassessment & evaluation of changing condition. 2. Recognition of deteriorating condition. 3. Ask nursing colleagues for help 4. Call MD and report change in condition using SBAR 5. Based on confusion and changing VS, suspect sepsis 6. Communicate with patient and family to keep them up to date and involved in care. <p>MD ORDERS: Ask RN "what do you think is going on with Mr. Fisher?" If RN communicates enough information that MD would suspect sepsis:</p> <ol style="list-style-type: none"> 1. Blood cultures x 2, 2. UA, urine culture, lactic acid, procalcitonin, 3. 1L NS bolus. 4. Call me back with labs. 	<p>Debriefing Points:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Strategies for ensuring that all assessments/interventions /reassessments are completed. <input type="checkbox"/> Essential elements of taking telephone orders. <input type="checkbox"/> importance of asserting RNs perspective in patient care discussions/decisions. <input type="checkbox"/> S/S of early sepsis <input type="checkbox"/> Evidence based care for sepsis <input type="checkbox"/> importance of drawing blood cultures before administering antibiotics.

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p>3.</p> <p>Remains confused.</p>	<p>Operator: Call RN from lab UA + for UTI. Lactic acid level =5, Procalcitonin = 3</p> <p>BP 94/57 HR 99 RR 22, O₂ sat 94% T 96.7</p> <p>MD ORDERS during scenario 1. Cipro 400mg IV BID first dose now. 2. Initiate sepsis protocol</p> <p>Triggers:</p>	<p>Learner Actions:</p> <ol style="list-style-type: none"> 1. Initiate and prioritize new orders <ul style="list-style-type: none"> - Administer IV NS bolus - Notify MD of new lab results 2. Delegate duties to nursing colleague or other members of the healthcare team. 3. Reorient patient as needed and maintain patient safety 4. ask family member to stay with patient due to confusion. 	<p>Debriefing Points:</p> <p>Impact of UTI on mentation</p> <p>Priority interventions =</p> <ul style="list-style-type: none"> - IV fluids -Call RRT team -SBAR communication -Interventions initiated <p>Safety procedures for taking telephone orders Read back & Verify (RAV)</p> <p>Procedures for verifying orders when using EMR</p>
<p>Scenario End Point: Scenario End Point: Antibiotics are hung</p>			
<p>Suggestions to <u>decrease</u> complexity: no family member Suggestions to <u>increase</u> complexity: patient deteriorates more quickly (no longer early sepsis); family or physician may be disruptive Patient aggressive or trying to get out of bed.</p>			

APPENDIX A: HEALTH CARE PROVIDER ORDERS

Patient Name: Greg Fisher		Diagnosis: Altered level of consciousness; s/p fall
DOB: 08/08/XX		
Age: 78		
MR#:12345		
†No Known Allergies		
†Allergies & Sensitivities		
Date	Time	HEALTH CARE PROVIDER ORDERS AND SIGNATURE
	2300	Admit to Med Surg Floor
		Code Status - DNR
		Vital signs every 4 hours
		High risk for falls – up with assistance only
		I & O every shift
		Regular diet
		Encourage oral intake
		Saline lock – flush per unit protocol
		Neuro checks Q4 hours
		Meds:
		Aricept 5 mg qhs
		Lisinopril 40 mg po daily
		Hydrochlorothiazide 25 mg po daily
		Atenolol 50 mg po daily
		KCL 20 meq po daily
		Glucophage 1000 mg po daily
		Tylenol 650 mg po q 6 hours prn mild pain or fever > 101.5
		Vicodin 5/500mg po Q4 hours PRN moderate pain
		Lorazepam 1 mg po q 12 hours prn agitation
		CBC and Chem Panel in AM
Signature		

APPENDIX B: Digital images of manikin and/or scenario milieu

<p>Insert digital photo here</p>	<p>Insert digital photo here</p>
<p>Insert digital photo here</p>	<p>Insert digital photo here</p>

APPENDIX C: DEBRIEFING GUIDE

General Debriefing Plan

<input type="checkbox"/> Individual	<input type="checkbox"/> Group	<input type="checkbox"/> With Video	<input type="checkbox"/> Without Video
Debriefing Materials			
<input 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 type="checkbox"/> Patient Centered Care	<input type="checkbox"/> Teamwork/Collaboration	<input type="checkbox"/> Evidence-based Practice	
<input type="checkbox"/> Safety	<input type="checkbox"/> Quality Improvement	<input type="checkbox"/> Informatics	
Sample Questions for Debriefing			
<ol style="list-style-type: none"> 1. How did the experience of caring for this patient feel for you and the team? 2. Did you have the knowledge and skills to meet the learning objectives of the scenario? 3. What GAPS did you identify in your own knowledge base and/or preparation for the simulation experience? 4. What RELEVANT information was missing from the scenario that impacted your performance? How did you attempt to fill in the GAP? 5. How would you handle the scenario differently if you could? 6. In what ways did you check feel the need to check ACCURACY of the data you were given? 7. In what ways did you perform well? 8. What communication strategies did you use to validate ACCURACY of your information or decisions with your team members? 9. What three factors were most SIGNIFICANT that you will transfer to the clinical setting? 10. At what points in the scenario were your nursing actions specifically directed toward PREVENTION of a negative outcome? 11. Discuss actual experiences with diverse patient populations. 12. Discuss roles and responsibilities during a crisis. 13. Discuss how current nursing practice continues to evolve in light of new evidence. 14. Consider potential safety risks and how to avoid them. 15. Discuss the nurses' role in design, implementation, and evaluation of information technologies to support patient care. 			
Notes for future sessions:			