CINHC Optimizing Health through Nursing Excellence
CALIFORNIA INSTITUTE FOR NURSING & HEALTH CARE

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 (CVBSC, 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.cinhc.org/programs.

All scenarios have been validate 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)

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SECTION I: SCENARIO OVERVIEW

Scenario Title:	Fetal Distress in 15 year old primipara
Original Scenario Developer(s):	Sharon Vaughn, RN, MPH Tina King, RN, BSN
Date - original scenario	08-02-09
Validation:	11-02-09 Marjorie Miller, MA, RN, Marty Potkin, RN
Revision Dates:	04-04-10
Pilot testing:	11-10-09
QSEN revision:	06-01-12 Marjorie Miller, MA, RN, CHSE

Estimated Scenario Time: 15-20 minutes   Debriefing time: 30-40 minutes

Target group: Pre-licensure RN students
Core case: 15 year old primipara in active labor – fetal distress

QSEN Competencies:

- Safety
- Patient Centered Care
- Teamwork and Collaboration

Brief Summary of Case: 15 year old unmarried Hispanic woman admitted through ED in active labor, accompanied by sister and brother. Brought to the ED due to GI distress and abdominal pain. Admitted to L & D and monitor placed. Deceleration noted. Learners expected to assess, recognize deceleration and intervene appropriately while supporting the laboring mother and family. Problem resolved.

This scenario can be used as the first in a 4 part series or as a stand-alone scenario. It can also be combined for more advanced practitioners.

EVIDENCE BASE / REFERENCES (APA Format)
McKinney, E., et al. (2009). Maternal-Child Nursing. St. Louis, MO: Elsevier Saunders.
Zerbe, M. & Bamblian, V. (2003). Noelle maternal and neonatal simulation system: Instructor and student guide. Miami, FL: Gaumard.
Silvestri, L. (2008). Comprehensive review for the NCLEX-RN examination. St. Louis, MO: Saunders.
Gregory, D. (2006). Clinical decision making: Case studies in maternity and women's health. Clifton Park, NY: Thomson-Delmar Learning.
Cronenwett, L., Sherwood, G., Barnsteiner, J. et al. (2007). Quality and safety education for nurses. Nursing Outlook, 55(3), 122-131. doi:10.1016/j.outlook.2007.02.006

ALL DATA IN THIS SCENARIO IS FICTICIOUS

SECTION II: CURRICULUM INTEGRATION

A. SCENARIO LEARNING OBJECTIVES
Learning Outcomes
1. Utilize principles and care practices related to non-reassuring fetal heart rate pattern.
2. Implement critical thinking and clinical decision making skills necessary to interpret data.
3. Integrate understanding of multiple dimensions of patient-family centered care.
4. Provide safe care to laboring patients, prioritizing and implementing interventions for fetal distress.
Specific Learning Objectives
1. Identify and interpret significant assessment findings requiring immediate reporting and/or intervention.
2. Recognize the non-reassuring fetal heart rate pattern.
3. Accurately prioritize immediate interventions required for a client with an non-reassuring fetal pattern.
4. Implement appropriate nursing interventions at this point in the labor process.
5. Communicate relevant patient information to interprofessional team (chain of command) using SBAR tool.
6. Effectively communicate with client throughout simulation to keep informed and relieve anxiety.
7. Perform pain assessment and reassure patient realistically.
Critical Learner Actions
1. Identifies self and role to patient and family members.
2. Performs hand hygiene.
3. Identifies patient using 2 identifiers.
4. Prioritizes assessment for both mother and fetus.
5. Recognizes non-reassuring fetal heart tracing and calls for immediate assistance, communicating findings using SBAR to interprofessional team.
6. Communicates calmly with patient and family members while implementing interventions for non-reassuring fetal monitoring pattern.
7. Administers oxygen per mask at 10 L/minute
8. Collects equipment to initiates IV (if not already initiated) and administers bolus
9. Reassesses mother and fetal heart tracing throughout.

B. PRE-SCENARIO LEARNER ACTIVITIES	
Prerequisite Competencies Required prior to participating in the scenario	
Knowledge	Skills/ Attitudes
❑ Fetal Heart patterns indicating non-reassuring fetal heart rate patterns.	❑ General survey and focused assessment of newly admitted patient in active labor
❑ Pain theory related to child birth.	❑ Recognition of and interventions for non-reassuring fetal heart patterns
❑ Pharmacology of medications administered during intra-partum period.	❑ Recognition of need and timing in calling for assistance from interprofessional team
❑ Therapeutic communication with patient and family.	❑ Dimensions of patient-family centered care in dealing with acute situations
❑ SBAR communication with interprofessional team.	❑ Comfort measures for laboring patient including family involvement

SECTION III: SCENARIO SCRIPT

A. Case summary
Leticia Garcia 15 year old, g1-p0, single Hispanic female at 36 4/7 weeks gestation. Admitted to the OB unit doubled over in pain. OB staff nurse and New Grad enter triage room, find client on the gurney, and begin the admission process. Client continues to deny pregnancy, saying that the pain is from her sister's cooking. The New Grad takes vital signs, while the OB Preceptor adjusts the fetal monitor and begins the labor admission paperwork.

B. Key contextual details
None significant … admitted to OB triage room

C. Scenario Cast		
Patient/ Client	❑ High fidelity simulator	
	❑ Mid-level simulator	
	❑ Birthing manikin	
	❑ Hybrid (Blended simulator)	
	❑ Standardized patient	
Role	Brief Descriptor (Optional)	Confederate (C) or Learner (L)
RN 1 – new graduate	Assessment, Admission of patient	Learner
RN 2 – experienced Perinatal preceptor	Assists with paperwork Assesses fetal monitor	Learner
Sister or brother	Expresses concern over sister's acute pain	Confederate / Actor
Charge nurse	Arrives to assist with non-reassuring tracing	Confederate / Actor

D. Patient/Client Profile				
Last name:	Garcia		First name:	Leticia
Gender: Fe	Age: 15	Ht: 5'2"	Wt: 158#	Code Status: Full
Spiritual Practice: Catholic		Ethnicity: Puerto Rican		Primary Language spoken: English/Spanish

1. History of present illness	
Chief Complaint: Excruciating abdominal pain. Visiting from Florida visiting sister and in complete denial of pregnancy. Her parents are first generation Puerto Rican immigrants. Parents and sister are totally unaware she is pregnant. Because of her denial she has had no prenatal care. At her sister's home at 0100 she begins to experience strong abdominal cramps. She does not tell her sister until 0700 and states she has a bad stomach ache. Her sister sees she is in a lot of pain and immediately takes her to the nearest hospital.	
Primary Medical Diagnosis	Full term pregnancy

2. Review of Systems	
CNS	Alert, oriented, cooperative, fearful
Cardiovascular	Regular sinus rhythm, no gallops, rubs or murmurs, apical clear, pulses +4 radial and pedal
Pulmonary	Clear to A&P
Renal/Hepatic	Voiding clear urine, no hepatamegaly felt
Gastrointestinal	Distended, full term pregnancy
Endocrine	Full term pregnancy
Heme/Coag	No bruising or bleeding noted
Musculoskeletal	Moves all extremities well. Spine within normal limits
Integument	Clear without abrasions
Developmental Hx	Normal Hispanic teenager
Psychiatric Hx	None reported
Social Hx	Sexually active, no reported drug, smoking or alcohol history
Alternative/ Complementary Medicine Hx	unknown

Medication allergies:	None reported	Reaction:	
Food/other allergies:	NKDA	Reaction:	

3. Current medications	Drug	Dose	Route	Frequency

ALL DATA IN THIS SCENARIO IS FICTICIOUS

4. Laboratory, Diagnostic Study Results					
Na: 142	K: 4.2	Cl: 102	HCO3: 26	BUN:	Cr:
Ca: 9.3	Mg: 1.2	Phos:	Glucose:	HgA1C:	
Hgb: 13	Hct: 36.8	Plt: 265	WBC: 5.2	ABO Blood Type:	
PT: 11.5	PTT: 25	INR	Troponin:	BNP:	
Ammonia:	Amylase:	Lipase:	Albumin:	Lactate:	
ABG-pH:	paO2:	paCO2:	HCO3/BE:	SaO2:	
VDRL: neg	GBS: pending	Herpes: neg	HIV: neg	Chlymidia: neg	
CXR:		ECG:			
CT:		MRI:			
Other:					

E. Baseline Simulator/Standardized Patient State

(This may vary from the baseline data provided to learners)

1. Initial physical appearance	
Gender: Fe	Attire: hospital gown
Alterations in appearance (moulage): Long black curly wig Skin damp & flushed	

x	ID band present, accurate information		ID band present, inaccurate information		ID band absent or not applicable
	Allergy band present, accurate information		Allergy band present, inaccurate information	x	Allergy band absent or not applicable

2. Initial Vital Signs Monitor display in simulation action room:							
	No monitor display		Monitor on, but no data displayed	x	Monitor on, standard display		

BP: 145/90	HR: 102	RR: 28	T: 99° F.	SpO2: 95%
CVP:	PAS:	PAD:	PCWP:	CO:
AIRWAY:	ETC02:	FHR:		
Lungs: Sounds/mechanics	Left:		Right:	
Heart:	Sounds:	S1, S2 no ectopy		
	ECG rhythm:	Sinus tachycardia		
	Other:			
Bowel sounds:	Active x 4		Other:	

ALL DATA IN THIS SCENARIO IS FICTICIOUS

3. Initial Intravenous line set up							
	Saline lock	Site:					IV patent (Y/N)
	IV #1	Site: RA		Fluid type: Lactated Ringers	Initial rate: 125 mL/hr		IV patent (Y/N)
	Main						
	Piggyback						

4. Initial Non-invasive monitors set up					
x	NIBP		ECG First lead:		ECG Second lead:
x	Pulse oximeter		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	x	Infusion pump:	Pump settings: Primary	125 mL/hr
	Fetal Heart rate monitor/tocometer			Internal	External

Environment, Equipment, Props (Recommend standardized set up for each commonly simulated environment)
1. Scenario setting: (example: patient room, home, ED, lobby)
Perinatal Unit

2. Equipment, supplies, monitors (In simulation action room or available in adjacent core storage rooms)							
x	Bedpan/ Urinal	x	Foley catheter kit	x	Straight cath. kit		Incentive spirometer
x	IV Infusion pump	x	OB kit		Pressure bag	x	Wall suction
x	Nasogastric tube		ETT suction catheters	x	Oral suction cath		Chest tube insertion kit
	Defibrillator		Code Cart		12-lead ECG		Chest tube equip
	PCA infusion pump		Epidural infusion pump		Central line kit		Dressing Δ equipment
x	IV fluid	Lactated Ringers		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		Flowmeters (extra supply)		

4. Documentation and Order Forms							
x	Provider orders	x	Med Admin Record	x	H & P	x	Lab Results
	Progress Notes	x	Graphic record	x	Medication recon.		Prenatal record
x	Nurses' Notes	x	Actual medical record binder				Other

5. Medications (to be available in sim action room)								
#	**Medication**	**Dosage**	**Route**		**#**	**Medication**	**Dosage**	**Route**
2	Terbutaline	0.25 mg	Sub-q		2	Stadol	2 mg	IV
2	Fentanyl	50 mcg -l00 mcg	IV					

CASE FLOW / TRIGGERS/ SCENARIO DEVELOPMENT STATES			
Initiation of Scenario : Leticia Garcia 15 year old, G1P0, SHF at 36 4/7 wga. Admitted to the OB triage room doubled over in pain. OB new grad enters the OB triage room to begin the labor admission paperwork by taking the vital signs and FHR. Leticia still denies being pregnant, says it must be her sister's cooking. Sister is at the bedside with her.			
STATE / PATIENT STATUS	**DESIRED LEARNER ACTIONS & TRIGGERS TO MOVE TO NEXT STATE**		
1. Baseline Client on gurney in OB triage area. Head end of gurney is elevated to 30 degrees Experiencing severe abdominal cramps, restless, crying, screaming, flushed and diaphoretic **States, "I'm not pregnant! It is my sister's cooking."** **Cues: If learners do not notice decreasing FHR, sister cues "Why** does the sound slow down so much?"	**Operator** Initial vital signs: Display when learner initiates. BP: 145/95 HR: 110 RR: 30 O_2 Sat: 94% Temp: 99°F. FHR: 130 with accelerations. Contraction pattern: q2-3 min for 60-70 seconds. **Make change in 2-3 minutes.** FHR: 100-110 with decelerations **Triggers:** Learner Actions completed within 5 -7 minutes	**Learner Actions** 1. Performs hand hygiene 2. Introduces self, team mate and roles to patient and family 3. Identifies patient using 2 identifiers 4. Begins assessment considering both laboring mother and fetal heart pattern assessment 5. Assesses pain 6. Recognizes non-reassuring fetal heart monitor pattern and alerts preceptor 7. Engages patient and family in plan of care, calmly reinforcing that patient is in active labor. 8. Communicates assessment findings to preceptor	**Debriefing Points:** 1. National Patient Safety Goals 2. Strategies to gain patient and family cooperation in escalating situation. 3. Fetal Heart Patterns indicating fetal distress 4. Priority setting with competing priorities (laboring mother's pain, family distress, non-reassuring fetal heart patterns 5. Necessity of team communication and calling for assistance early.

ALL DATA IN THIS SCENARIO IS FICTICIOUS

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
2. Patient continues to express that she is not pregnant. Expresses fear over the amount of pain. "I'm really scared! Can't you do something for this pain. I can't stand it".	**Operator:** FHR-150 with increasing number of decelerations. Contraction pattern: 1-2 min apart. HR-120 RR - 30 O_2 sat- 95% BP- 136/98 **Triggers:** Patient states- "The pain does not stop".	**Learner Actions:** 1. Engages patient in plan of care with clear, calm explanations while performing interventions. 2. Administers Oxygen @ 10 L per mask 3. Assists patient to change position to her side 4. Increases rate of IV fluid to administer bolus per standard protocol 5. Calls for additional assistance 6. Divides tasks between preceptor and new grad 7. Provides SBAR to additional members of interprofessional team. 8. Uses closed loop communication during interventions 9. Reassesses fetal heart pattern	**Debriefing Points:** 1. Teamwork and Collaboration skills 2. Early request for assistance 3. Rationale for each of the interventions for non-reassuring fetal heart pattern. 4. Strategies for meeting patient and family needs during deteriorating situation 5. Closed loop communication

<table>
<tr><th>STATE / PATIENT STATUS</th><th colspan="3">DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE</th></tr>
<tr><td>3.

Patient continues to express distress over pain and condition.

Vital signs and fetal heart pattern normal.

Sister worried and frustrated with sister. States “what am I going to tell Mom and Dad about you? How could you go and get pregnant? You’re just a baby yourself.”</td><td>Operator:

HR-120
RR - 30
O_2 sat- 95%
BP- 136/98

FHR-150 normal pattern

Triggers: Performs action within 5 minutes</td><td>Learner Actions:

1. Gives SBAR to charge nurse on entry to room.
2. Calls MD to give SBAR on patient following vaginal exam
3. Provides current information and next steps to patient and family
4. Administers medication for pain after further assessment following all safety guidelines
5. Decreases IV flow rate following administration of bolus
6. Assesses for bladder distension and provides access to bedpan if indicated.</td><td>Debriefing Points:

1. Strategies for calming patient and family after fetal distress is resolved
2. Role play communication with family considering new awareness of pregnancy and active labor
3. Next steps if fetal distress had not been resolved
4. Strategies for gaining cooperation and quickly teaching family support for young pregnant woman with no prenatal care</td></tr>
<tr><td colspan="4">Scenario End Point: Patient calming with decrease in pain and family support. Fetal distress resolved.</td></tr>
<tr><td colspan="4">Suggestions to <u>decrease</u> complexity: decrease labor progression and level of pain / normal early labor progression (See Scenario B)
Suggestions to <u>increase</u> complexity:
1. Fetal distress unresolved; proceed to crash C-section
2. Increase severity of pain
3. Patient becomes more uncooperative and combative
4. Family members become hysterical</td></tr>
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ALL DATA IN THIS SCENARIO IS FICTICIOUS

APPENDIX A: HEALTH CARE PROVIDER ORDERS

Patient Name: **DOB:** **Age:** **MR#:**	**Diagnosis:**

†No Known Allergies
†Allergies & Sensitivities

Date	Time	**HEALTH CARE PROVIDER ORDERS AND SIGNATURE**
Signature		

APPENDIX B: Digital images of manikin and/or scenario milieu	
Insert digital photo here	**Insert digital photo here**
Insert digital photo here	**Insert digital photo here**

APPENDIX C: DEBRIEFING GUIDE

General Debriefing Plan			
☐ Individual	☐ Group	☐ With Video	☐ Without Video
Debriefing Materials			
☐ Debriefing Guide	☐ Objectives	☐ Debriefing Points	☐ QSEN

QSEN Competencies to consider for debriefing scenarios		
☐ Patient Centered Care	☐ Teamwork/Collaboration	☐ Evidence-based Practice
☐ Safety	☐ Quality Improvement	☐ Informatics

Sample Questions for Debriefing

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: