SECTION I: SCENARIO OVERVIEW

Scenario Title:	Fetal Distress in 15-year-old primipara
Original Scenario Developer(s):	S. Vaughn, RN, MPH T. King, RN, BSN
Date - original scenario	08/09
Validation:	11/09 M. Miller, MA, RN, M. Potkin, RN
Revision Dates:	08/18 C.Lopez, MSN, CNS, RNC-OB, CPHRM, CHSEA; 4/10 mm
Pilot testing:	11/09
QSEN revision:	06/12 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.
- ❑ Scenario A – New Admission – Fetal Distress
- ❑ Scenario B – Imminent Delivery – Normal
- ❑ Scenario C Postpartum Hemorrhage

EVIDENCE BASE / REFERENCES (APA Format)
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
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Gregory, D. (2006). Clinical decision making: Case studies in maternity and women's health. Clifton Park, NY: Thomson-Delmar Learning.
Kelly, P., Vottero, B., Christie-McAuliffe, C. (2014). Introduction to Quality and Safety Education for Nurses. New York, N.Y: Springer Publishing Co., LLC.
Laredal Medical Corporation, Wappingers Falls, NY. (2018). PROMPT Birth Simulator. Retrieved from https://www.laerdal.com/us/archive/prompt-birthing-simulator/
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Miller, L., Miller, D., & Cypher, R. (2017). *Mosby's Pocket Guide to Monitoring: A Multidisciplinary Approach* (8th ed.). St Louis, MO: Elsevier.
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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 a 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 initiate 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/focused assessment of newly admitted patient in active labor
❑ Pain theory related to child birth.	❑ Recognition/interventions for non-reassuring FH
❑ 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

ALL DATA IN THIS SCENARIO IS FICTITIOUS

SECTION III: SCENARIO SCRIPT

A.   Case summary
Leticia Garcia 15-year-old, G1-P0, single Hispanic female at 37 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 OR	
	❑ Hybrid (Blended simulator) *preferred	
	❑ Standardized patient	
Role	Brief Descriptor (Optional)	Standardized Participant (SP) 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	Standardized Participant
Charge nurse	Arrives to assist with non-reassuring tracing	Standardized Participant

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 hepatomegaly 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

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4. Laboratory, Diagnostic Study Results

Na: 142	K: 4.2	Cl: 102	HCO3: 2622	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	Chlamydia: 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 (optional if PROMPT and SP used)
Skin damp & flushed
Water balloon in birthing manikin to mimic bulging BOW. Charge nurse will have pin and break balloon during vaginal exam.

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:	

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3. Initial Intravenous line set up

	Saline lock	Site:				IV patent (Y/N)
x	**IV #1**	Site:		Fluid type:	Initial rate:	IV patent (<mark>Y</mark>/N)
	Main	RA		Lactated Ringers	125 mL/hr	

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.
	<mark>Fetal Heart rate monitor</mark>/tocometer			Internal	<mark>External</mark>

<mark>**Environment, Equipment, Props (**Recommend standardized set up for each commonly simulated environment**)**</mark>

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 delivery 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	Fentanyl	50 mcg -I00 mcg	IV					

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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.

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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

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STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
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."	**Operator:** HR-120 RR - 30 O$_2$ sat- 95% BP- 136/98 FHR-150 normal pattern **Triggers:** Performs action within 5 minutes	**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.	**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
Scenario End Point: Patient calming with decrease in pain and family support. Fetal distress resolved.			

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			

ALL DATA IN THIS SCENARIO IS FICTITIOUS

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 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 considering 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: