

OB

Estimated Time: 20 minutes • Debriefing Time: 20 minutes



Scan to Begin



Patient Name: Olivia Brooks

SCENARIO OVERVIEW

Olivia Brooks is a 22-year-old, pregnant female who was found in the restroom of a local college after bystanders heard her yelling for help.

Level 4 requires a “Scene Size-Up,” “Primary Survey,” “Secondary Assessment,” and “Reassessment (of scene safety)” based on the National Registry of Emergency Technicians Advanced Level Psychomotor Exam.

Note: To emphasize the clinical criteria of a 15-minute time limit, timers are in place so that if a student does not make a Transport decision within 10 minutes, they receive a warning. If they do not make a Transport decision within 15 minutes, they will automatically be exited from the scenario.

LEARNING OBJECTIVES

1. Gather information related to dispatch
2. Perform a “Scene Size-up”
3. Perform a “Primary Survey”
4. Make Transport Decision
5. Perform a “History Taking & Secondary Assessment”
6. Interpret Vital Signs and Diagnostics
7. Verbalize proper interventions/treatment
8. Perform “Reassessment” of scene safety

CURRICULUM MAPPING

WTCS EMT-P PROGRAM OUTCOMES

- Prepare for incident response and EMS operations
- Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
- Communicate effectively with others
- Demonstrate professional behavior
- Meet state and national competencies listed for EMT- paramedic certification(s)

SIMULATION LEARNING ENVIRONMENT & SET-UP

PATIENT PROFILE

Name: Olivia Brooks

Gender: Female

DOB: 01/29/XX

Height: 162.5 cm (5 ft 5 in)

Age: 22

Weight: 70.9 kg (156 lbs)

EQUIPMENT/SUPPLIES/SETTINGS

Patient

- Street clothes with belly to simulate 32 weeks pregnant
- Bathroom is littered with papers and books, garbage is tipped over, and it looks there was a scuffle

Monitor Settings

- None

QR CODES

<p>DISPATCH</p> 	<p>SCENE</p> 	<p>PATIENT</p> 	<p>BYSTANDER</p> 
<p>NORMAL SALINE</p> 	<p>NOREPINEPHRINE</p> 	<p>DOPAMINE</p> 	<p>EPINEPRINE</p> 

TEACHING PLAN

PREBRIEF

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

- Scan the **QR code: “Scan to Begin”** while students are in Prebrief
- “Meet Your Patient” (on iPad) and explain how the iPad works in the simulated learning environment including:
 - Facilitator note: This scenario has been designed to flow without scanning additional QR codes for convenience in the classroom. For added flexibility, you may elect to use the QR codes provided above to design your own scenario flow.
- Discuss the simulation “Learning Objective(s)” (on iPad) as well as any other Prebrief materials

STATE 1

RECEIVE DISPATCH

- Play “Dispatch” (on iPad): “ARISE EMS: You’re dispatched for a 22-year-old female patient. She is in a bathroom at ARISE University after an apparent domestic abuse incident. Assailant has apparently fled the scene. Caller stated she was pregnant, but didn’t know how far along and there may be evidence of vaginal bleeding.”
- View the “En Route to the scene” message
- Preview the National Registry of EMT Advanced Level Psychomotor Examination form for Medical Assessment
- Possible Facilitator Question
 - What are your plans based on the dispatch you received?

STATE 2

SURVEY THE SCENE & PRIMARY SURVEY

- Play “Arrival on Scene” video
- View the plaque reminding students “Your transport decision must be made within 15 minutes.”
- View the plaque with the following questions:
 - Verbalize appropriate body substance isolation precautions
 - Verbalize how you will perform a “Scene Size-up”
- View the “Bystander” video
 - Verbalize how you would respond to the bystander
- View the “Patient” video
 - Verbalize how you would respond to the patient
- View the plaque entitled “Primary Survey” with the following questions:
 - Verbalize how you perform a Primary Survey for this patient.
 - What is your transport decision?
- View the plaque entitled “Indicate Transport Decision” with text stating “Indicate your transport decision by tapping the Transport tab.”
 - Students should then tap Transport Tab and indicate their decision (see instructions under the Transport Tab below.)
- Students should tap the Menu icon on the top left corner of the screen, then tap on the Transport tab to indicate their transport decision
- Tabbed iPad Content

EMERGENCY HOME SCREEN

This is the home screen. In the top left corner is the “menu” icon where the tabs described below can be accessed.

MEDICAL ASSESSMENT FORM

The National Registry of Emergency Medical Technicians, EMT Advanced Level Psychomotor Exam: Patient Assessment/Management – Medical form is displayed here. (It is also attached in Appendix A so that it can be printed out for the student if desired.)

PATIENT PROFILE

Demographic information about the patient is displayed under this tab.

SCENE SURVEY

Tap here to replay the video of the scene.

BYSTANDER

Tap here to replay the video of the bystander.

PATIENT

Tap here to replay the video of the patient.

TRANSPORT

Tap here to indicate transport decision. The following text appears:

- “Have you made your transport decision? Yes/No”
- If student selects “No”: a 15-minute timer appears with reminder “Your transport decision must be made within 15 minutes.”
- If student selects “Yes”: Another question appears: “Will you transport?”
- If student selects “Yes”: Student will see “Prepare to Transport” message
- If student selects No: Student will see “Communicate your decision to dispatch”

Note: Students have 15 minutes to indicate a Transport decision or they are automatically exited from the scenario. Students will receive a 10-minute warning.

LEVEL

Level 2 is displayed. In order to progress to State 3, students must indicate their transport decision using the Transport tab.

SCANNER

Use this to scan optional QR Codes.

EXIT

The iPad reads, “Are you sure you want to exit? All data will be lost?”

- If “No” is selected, the iPad will return to the tabbed content.
- If “Yes” is selected, the iPad will let the student(s) exit and prompt them to complete an embedded 3-5 minute survey.

STATE 3

SECONDARY ASSESSMENT & HISTORY TAKING

- View the plaque entitled “History Taking” with the following questions:
 - Verbalize the questions you would ask to obtain “History of Present Illness”
 - Verbalize questions you would ask to obtain “Past Medical History”
- View the plaque entitled “Secondary Assessment” with the following questions:
 - Verbalize how you would assess the affected body part(s)
- View the plaque entitled “Pulmonary Assessment: Anterior” with instructions to “Tap on anatomical location(s) to listen to lung sounds.”
 - An image a female chest appears with “hot spots” located over each anatomical location of the chest. When a “hot spot” is tapped, lung sounds can be heard (with best audio using ear buds or headphones).
- View the plaque entitled “Pulmonary Assessment: Posterior” with instructions to “Tap on anatomical location(s) to listen to lung sounds.”
- View the plaque entitled “Verbalize Interventions”
 - Interpret Olivia’s vital signs:
 - Pulse 112, RR 28, BP 108/62, O2 Saturation 100%
- View new “Patient” video
 - Verbalize how you would respond to the patient
- View plaque entitled “Diagnostics” with the following:
 - To “perform” an Obstetric Abdominal Exam, tap the “Begin Exam” button. Students will see three serial images of a paramedic performing the exam.
- View plaque entitled “Abdominal Exam Findings” with the following results/question:
 - Patient complained of a sharp pain (5 out of 10) in her right lower abdomen during palpation.

- Brief visual examination of vaginal area shows a small to moderate amount bloody discharge, but no crowning evident.
- Verbalize your interpretation of these results.
- View video of capillary refill
- View plaque entitled “Capillary Refill Assessment” with the following question:
 - Verbalize your interpretation of this exam
- View video of the patient during a Neurological Assessment
- View plaque entitled “Neurological Assessment” with the following question:
 - Verbalize your interpretation of this exam
- View plaque entitled “Treatment Plan” and answer the associated questions:
 - What is your field impression of patient?
 - Verbalize your treatment plan per Protocol provided (There are 3 Protocols and students must view all 3 to advance to State 4.)
 - Re-evaluate and verbalize your current transport decision
- Tabbed iPad Content

PROTOCOL

The iPad reads, “Use these protocols to make decisions regarding patient interventions and treatment.”

Printable versions of the OB, Seizure, and Shock protocols are available in Appendix B.

VITAL SIGNS

This form is open for entry and displays Olivia’s last vitals: Pulse 112, RR 28, BP 108/62, O2 Saturation 100%

DIAGNOSTICS

The iPad displays the “Obstetric Abdominal Exam” images as well as the “Abdominal Exam Findings.”

STATE 4

REASSESSMENT OF SCENE SAFETY

- View video of alleged assailant returning to the scene
- View plaque entitled “Verbalize Actions” with the following question:
 - Verbalize how you should respond and ALL necessary actions for this situation
- View plaque that reads, “Scenario objectives have been met. You may exit the scenario.” Students can exit by tapping on the Exit tab.

BOYFRIEND

Tap here to replay the video of the alleged assailant.

EXIT

Students may exit the scenario after verbalizing their actions. The iPad will read, “Scenario objectives have been met. Are you sure you want to exit the game?”

- If “No” is selected, the iPad will return to the tabbed content.
- If “Yes” is selected, the iPad will let the student(s) exit and prompt them to complete an embedded 3-5 minute survey.

DEBRIEF

Nothing needed from the iPad.

QUESTIONS

1. How did you feel this scenario went?
2. Review understanding of scenario learning objectives.
 - a. Was the scene safe? Explain.
 - b. What actions are required when an altercation is suspected?
 - c. What body isolation precautions were appropriate?
 - d. What is the nature of the patient's condition?
 - e. Did you require additional EMS assistance? Why or why not?
 - f. What did you discover during your Primary Survey?
 - g. What was your transport decision? Why?
 - h. What information did you gather during your Secondary Assessment, History Taking, and interpretation of vital signs and diagnostics?
 - i. What treatments did you initiate per protocol?
 - j. How did you respond to the change in scene safety?
 - k. If you could "do over," would you do anything differently?
3. Summary/Take Away Points:
 - a. "Today you analyzed the scene and performed a Scene Size-up, Primary Survey, Secondary Assessment, and Reassessment for a 22-year-old pregnant female found in a public restroom of a local college after an apparent altercation. What is one thing you learned from participating in this scenario that you will take with you into your EMS practice?" (Each student must share something different from what the others' share.)

NOTE: Debriefing technique is based on INASCL Standards for Debriefing

SURVEY

Print this page and provide to students.

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

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



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

APPENDIX A



National Registry of Emergency Medical Technicians
Advanced Level Psychomotor Examination

PATIENT ASSESSMENT - MEDICAL

Candidate: _____ Examiner: _____
 Date: _____ Signature: _____
 Scenario: _____

Actual Time Started: _____	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
SCENE SIZE-UP		
Determines the scene/situation is safe	1	
Determines the mechanism of injury/nature of illness	1	
Determines the number of patients	1	
Requests additional help if necessary	1	
Considers stabilization of spine	1	
PRIMARY SURVEY		
Verbalizes general impression of the patient	1	
Determines responsiveness/level of consciousness	1	
Determines chief complaint/apparent life-threats	1	
Assesses airway and breathing -Assessment (1 point) -Assures adequate ventilation (1 point) -Initiates appropriate oxygen therapy (1 point)	3	
Assesses circulation -Assesses/controls major bleeding (1 point) -Assesses skin [either skin color, temperature, or condition] (1 point) -Assesses pulse (1 point)	3	
Identifies priority patients/makes transport decision	1	
HISTORY TAKING AND SECONDARY ASSESSMENT		
History of present illness -Onset (1 point) -Severity (1 point) -Provocation (1 point) -Time (1 point) -Quality (1 point) -Clarifying questions of associated signs and symptoms as related to OPQRST (2 points) -Radiation (1 point)	8	
Past medical history -Allergies (1 point) -Past pertinent history (1 point) -Events leading to present illness (1 point) -Medications (1 point) -Last oral intake (1 point)	5	
Performs secondary assessment [assess affected body part/system or, if indicated, completes rapid assessment] -Cardiovascular -Neurological -Integumentary -Reproductive -Pulmonary -Musculoskeletal -GI/GU -Psychological/Social	5	
Vital signs -Pulse (1 point) -Respiratory rate and quality (1 point each) -Blood pressure (1 point) -AVPU (1 point)	5	
Diagnostics [must include application of ECG monitor for dyspnea and chest pain]	2	
States field impression of patient	1	
Verbalizes treatment plan for patient and calls for appropriate intervention(s)	1	
Transport decision re-evaluated	1	
REASSESSMENT		
Repeats primary survey	1	
Repeats vital signs	1	
Evaluates response to treatments	1	
Repeats secondary assessment regarding patient complaint or injuries	1	
Actual Time Ended: _____		
CRITICAL CRITERIA	TOTAL	48

- _____ Failure to initiate or call for transport of the patient within 15 minute time limit
- _____ Failure to take or verbalize body substance isolation precautions
- _____ Failure to determine scene safety before approaching patient
- _____ Failure to voice and ultimately provide appropriate oxygen therapy
- _____ Failure to assess/provide adequate ventilation
- _____ Failure to find or appropriately manage problems associated with airway, breathing, hemorrhage or shock [hypoperfusion]
- _____ Failure to differentiate patient's need for immediate transportation versus continued assessment and treatment at the scene
- _____ Does other detailed history or physical examination before assessing and treating threats to airway, breathing, and circulation
- _____ Failure to determine the patient's primary problem
- _____ Orders a dangerous or inappropriate intervention
- _____ Failure to provide for spinal protection when indicated

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

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APPENDIX B

*ARISE EMERGENCY MEDICAL PROTOCOLS***OBSTETRICS & OBSTETRICAL EMERGENCIES****EMR****EMT****AEMT****Intermediate****Paramedic**

- Initial Medical Care
- If delivery is not imminent:
 - Transport patient in left lateral recumbent or semi-fowlers for ease of breathing
 - Monitor contractions including duration and time between contractions
- If any of the following are present, notify **Medical Control** immediately:
 - Heavy bleeding
 - Limb presentation
 - Multiple fetus'
 - Trauma to abdomen
 - Prolapsed cord
 - Place patient in Trendelenburg or knee to chest position
 - Advise patient not to “bear down” or push
 - Insert two fingers into birth canal and hold the presenting part off the cord to relieve pressure on the cord
 - DO NOT remove hand/fingers until receiving facility directs you to
- If delivery is imminent with a normal presentation (crowning noted):
 - Refer to **Neonatal Resuscitation** protocol following delivery
- Important documentation points:
 - Frequency and strength of contractions
 - Rupture of membranes
 - Meconium staining

- Fetal presentation
- Onset of labor
- Due date
- Gravida (# of pregnancies)
- Para (# of live births), any known anomalies
- APGAR score at 1 and 5 minutes.
- Prenatal provider (physician or midwife name) if possible

Routine Delivery

A side view as the baby's head is born. The face is pointed posteriorly and to one side. Note the position of the hands for a right handed EMT. A left-handed EMT would have the hands reversed. The hands support and exert gentle pressure to prevent rapid delivery of baby.

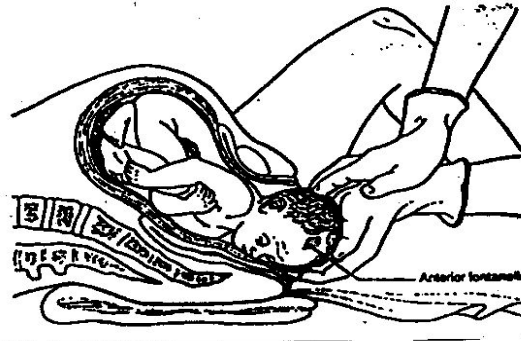


Figure 1

If the umbilical cord is wrapped tightly around the baby's neck, you must free, clamp, and cut it.

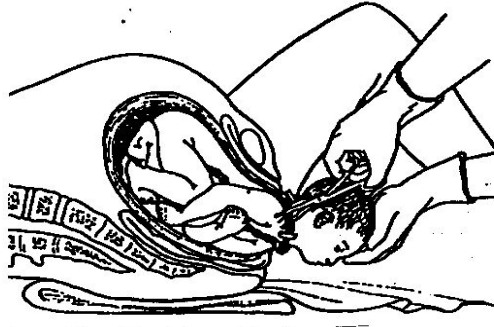


Figure 2

Once delivery of the head is complete, you should suction the baby's mouth and nostrils for the first time, using the bulb syringe.

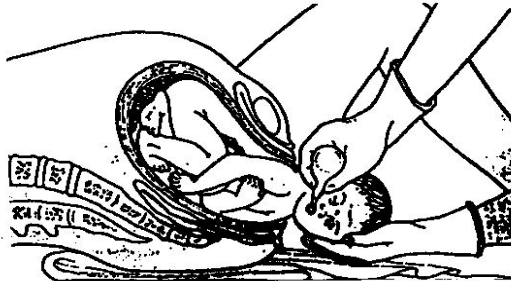


Figure 3

Support the baby's head with one hand, its trunk with your other hand. Remember that the baby is slippery, and you must hold it firmly but gently.

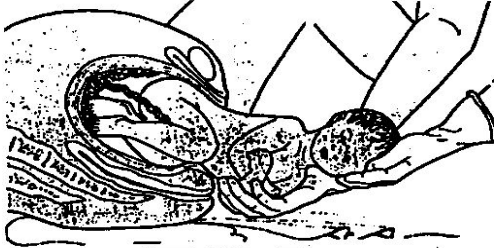


Figure 4



Figure 5

After delivery, place the baby at the level of the vagina, with its head lowered slightly. Clear the airway with the bulb syringe a second time.

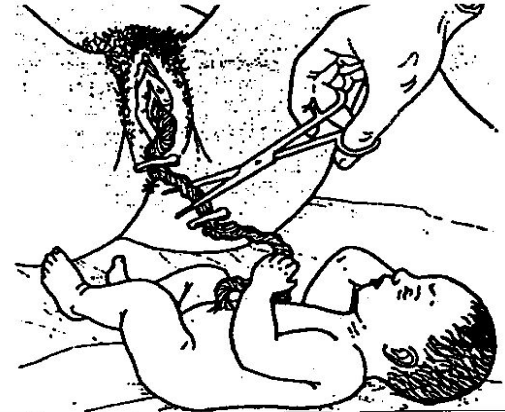


Figure 6

Clamp the umbilical cord with two sterile clamps, about 3 inches apart, placed halfway between the baby and the mother's vagina. Cut the cord between the 2 clamps. As an extra safeguard, tie the cord near the baby's navel with the special umbilical tape. Leave the clamps on the cord.

Vaginal Bleeding Pre-Delivery**EMR****EMT**

- Initial Medical Care
- Place on left lateral side, recumbent, for transport.
- Treat for shock.
- Monitor vital signs frequently.

AEMT**Intermediate****Paramedic**

- Consider **Fluid Bolus** to maintain MAP > 65

Vaginal Bleeding Post-Delivery**Emergency Medical Responder**

- Initial Medical Care
- Treat for shock.
- Monitor vital signs frequently.

Emergency Medical Technician

- Massage the fundus vigorously. Place non-dominant hand at the base of the uterus prior to massaging the fundus. This will anchor the uterus in place and prevent uterine inversion.
- Place baby to breast and have mom encourage baby to breastfeed
- Loose bulky dressings (do not pack)

Advanced EMT**Intermediate**

- Fluid Bolus to maintain MAP > 65

Paramedic

Oxytocin (Pitocin): 20 units
IM

(OR)

Oxytocin (Pitocin) Infusion: 20 units in
1000ml NS, run at 200 ml/hour

Pre – Eclampsia / Eclampsia

- Determine if patient is 20 WEEKS OR MORE pregnant or within four weeks post-partum
- Clarify history of pre-eclampsia
- Patients with **SBP >180** or **DBP >100**
- Treat patients even if the seizure resolves

EMR

EMT

- Initial Medical Care
- Ensure patent airway.
- Provide a quiet non-stimulating environment.
- Place in left lateral recumbent position.
- Refer to SEIZURE protocol

Advanced EMT

Intermediate

- Refer to SEIZURE protocol

Paramedic

- **Magnesium Sulfate:** 4g in 250 cc D₅W, run over 20 minutes
- **Labetolol:** 20 mg slow IV
 - May repeat **40 mg** every 10 minutes for persistent severe hypertension
 - **Max:** 300 mg
- Refer to SEIZURE protocol

Per MCPO:

- **Repeat Magnesium Sulfate: 2 grams in 250 cc D₅W, run over 20 minutes**

ARISE EMERGENCY MEDICAL PROTOCOLS

SEIZURES

Emergency Medical Responder

- Initial Medical Care
- Place patient in left lateral recumbent position and protect from injury.
- Assess blood glucose level and follow **HYPOGLYCEMIA** protocol if necessary.
- Document the length and number of seizures and the type and dosage of seizure medications.
- If seizures persist call for a paramedic intercept

Emergency Medical Technician

Advanced EMT

- Consider fluid bolus.

Intermediate

- **Midazolam (Versed): 5 mg** slow IV; **Intranasal / IM / IO** if unable to establish an IV
 - May repeat (x1) in 5 minutes if seizures continue

Contact Medical Control for sustained seizures:

Paramedic

*****Seizures suspected to be pre-eclamptic / eclamptic in origin*****

- Determine if patient is in 3rd trimester pregnancy or within one week post partum
- Clarify history of pre-eclampsia and/or previous history of seizure

Suspected Eclampsia

(Treat even if seizure resolves)

- **Magnesium Sulfate:** 4 g in 250cc D₅W, Run over 20 minutes
- If severe hypertension, follow OBSTETRICAL protocol

Per MCPO:

- **Repeat Magnesium Sulfate: 2 grams in 250 cc D₅W, Run over 20 minutes**

Chippewa Valley Regional Emergency Medical Services Protocols (2016). Medical Protocols.

ARISE EMERGENCY MEDICAL PROTOCOLS

Medical 21-1

SHOCK

Advanced EMT

Intermediate

Hypovolemic / Neurogenic:

- **Fluid bolus:** (Maintain systolic BP at 90-100 mm hg)
 - Initial 500 ml NS bolus is appropriate for most
 - Consider starting at **250 cc** for elderly, pulmonary edema or history of renal failure patients.
 - Reassess patient and repeat as needed based on clinical response and situation

Contact Medical Control for persistent Hypovolemic or Neurogenic shock despite 2 fluid boluses:

- **Possible Permissive Hypotension**

Septic:

- **Fluid bolus:** (Maintain systolic BP at 90-100 mm hg)
 - Start with 1L NS fluid bolus
 - Consider starting at 250 cc for elderly, pulmonary edema or history of renal failure patients.
 - Reassess patient and repeat as needed based on clinical response and situation.

Cardiogenic Shock: Assess rhythm and treat any abnormality first. Use ****caution**** with fluid.

- **Fluid bolus: 250 cc** (re-evaluate patient)
 - May repeat to max of 500 cc NS

Per MCPO, may repeat NS fluid bolus

Medical 21-2

SHOCK

Paramedic

- If the patient is exhibiting signs / symptoms of a tension pneumothorax perform a needle decompression

Neurogenic / Cardiogenic / Septic / Hypovolemic Shock:

Use vasopressors in **Hypovolemic Shock** only if refractory to fluid administration. Consultation with medical control is strongly suggested in this case.

Vasopressor Infusions – Titrate to achieve MAP \geq 65: (See Drip Charts – Appendix A)

Norepinephrine:

- **4mg in 250ml NS**
- **Start at 4-6 mcg/min**

Dopamine:

- **800mcg/ml**
- **2 – 10 mcg/kg/ min**

Per MCPO:

Epinephrine:

- **1mg in 250ml NS**
- **2 – 10 mcg / min**

- Use Dopamine only if Norepinephrine is not available
- If Neurogenic shock with bradycardia, dopamine or epinephrine is preferred
- Epinephrine Infusion is per Medical Control Physician Order

Chippewa Valley Regional Emergency Medical Services Protocols (2016). Medical Protocols.

CREDITS

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