

NeolmPACTS Scenario Title:

Precipitous delivery in the Emergency Department (ED)

General Information	
Clinical Diagnosis	Precipitous Delivery, Neonatal Resuscitation
Patient Details & Setting	Newborn male, Emergency Department
Target Learners	ED Care Team
Location	Emergency Department
Anticipated Duration	Scenario time: 15 min
Scenario Time:	Debrief time: 30 min
Debriefing Time:	

Learning Objectives:
Objective 1: Demonstrate how to adequately stock and use NRP equipment in the Emergency Dept
Objective 2: Describe how to adequately perform initial basic steps of newborn resuscitation (warm, dry, stimulate, position and clear airway, ventilate)
Objective 3: Describe the element of MR SOPA for corrective ventilation steps
Objective 4: Describe when and how to provide effective ventilation for a neonate
Objective 5: Describe the most important indicator of effective ventilation and response to resuscitative interventions (heart rate)

Educational Rationale
Learner will effectively perform neonatal resuscitation of a term infant born in the Emergency Department
ED Scenario Synopsis
Precipitous delivery in the emergency department. Learners are working in the ED when staff wheels in a newborn that has just been delivered in the ED parking lot. Newborn will be limp, cyanotic, and apneic. Care team must perform basic NRP interventions (dry, warm, stimulate, suction, ventilate) for 5-10 minutes until HR and ventilation improve. The child will not require intubation or CPR.

Scenario Setup

Scenario Description		
Location & Setting	Hospital	Emergency Department
	Unit/Room	Resus bay in which they would resus a newborn
	Debriefing Rm	TBD
Mannequin Set up	Mannequin	Newborn male (low or high fidelity)
	Wardrobe	None
	Monitor	Per ED resus bay set up
	Moulage	Amniotic fluid moulage
	Access	
	Other Details	Umbilical cord with clamp
	Embedded Person Roles	RN, possibly mother
Room Staging		
Medications	None	
Equipment for scenario (to be brought by Sim Team)	Infant warmer, newborn delivery materials (towels, bulb suction, gown, mask, gloves, protective eyewear), Neopuff and newborn BVM	
Medical Chart Information	EHR	N/A
	Lab Results	Glucose 110
	Imaging	N/A

Learner information to be given prior to start of scenario

You are working in the Emergency Department (ED) when you are told that staff is wheeling in a woman who has just delivered an infant in a car in the ED parking lot. The woman is reported to be at 39 weeks gestation with a previous history of a precipitous delivery. This was an uncomplicated pregnancy with no reported issues. The umbilical cord has been clamped and cut. The infant has been brought in by hospital staff and is on the warmer. The infant appears limp without any respiratory effort.

Pre-Sim Checklist	
<input type="checkbox"/>	Video recording enabled (if utilizing)
<input type="checkbox"/>	Debriefing location identified
<input type="checkbox"/>	COVID precautions for institution
<input type="checkbox"/>	
<input type="checkbox"/>	

Expected Participants
<p>Name & Role:</p> <ol style="list-style-type: none"> ED care team Possible consultants called for newborn resus (per hospital; could include pediatrics, anesthesia, NICU, PICU)

Scenario Logistics

Vital Signs & Events:			
Event/Trigger: Onset of scenario			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
<p>Transition time: N/A</p>	<p>Mannequin State: cyanotic, limp</p> <p>Actors: RN embedded participant, standardized patient as mother. <i>RN embedded participant will need to give team feedback about chest rise if not using a mannequin that shows chest rise.</i></p>	<ol style="list-style-type: none"> Place infant on warmer bed, dry and stimulate and suction if needed Assess HR and respirations Place pulse oximeter on right upper extremity and place cardiac leads on patient Bag mask ventilation 	<p>Elapse of 5 minutes</p>
<p>HR: 70</p> <p>BP: N/A</p> <p>Rhythm: sinus</p> <p>Sat: 50% RA</p> <p>RR: 0</p>			
<p>Time to stay at vitals: 5 min of adequate ventilation/resus</p>			

Vital Signs & Events:
Event/Trigger: elapse of 5 minutes

Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
Transition time: none	Mannequin State: cyanotic, limp Actors: RN embedded participant, Standardized patient as mother	Continue bag mask ventilation until heart rate greater than 100 bpm or infant breathing spontaneously	Elapse of 10 minutes
HR: 80, sinus BP: 45/30 Sat: 75% RR: 10			
Time to stay at vitals: 10 min of adequate ventilation/resus			

Vital Signs & Events:			
Event/Trigger: elapse of 10 minutes			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
Transition time: None	Mannequin State: Pink, crying Actors: RN embedded participant, Standardized patient as mother	Discontinue assisted ventilation, observe for continued improvement	Elapse of 12 minutes
HR: 130 BP: 50/35 Sat: 96% RR: 50			
Time to stay at vitals: until 12 minutes elapses			

Vital Signs & Events:			
Event/Trigger: 12 minutes			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
Transition time: 2 min HR: 160 BP: 70/50 Sat: RR:	Mannequin State: Pink, crying Actors: RN embedded participant, Standardized patient as mother	None	None
Time to stay at vitals:			

Scenario Endpoints
Final phase of scenario reached

Debriefing Points

Debriefing Points Following Learning Objectives	
Technical	Assembling and appropriate use of equipment, adequate ventilation
Cognitive	Roles clearly defined, good communication with team, following NRP guidelines for neonatal resus
Behavioral/Interpersonal	Delegation of roles/responsibilities, clear communication with closed loop communication
Other	

Scenario Support Materials, Pre and Post Tests, Evaluations

- Reference List:
- Pre-test or Pre-sim work:
- Post-test:
- Session Evaluations: