**Simulation Development Steps**

**Create a Case Scenario Utilizing the 4 T’s** *(Tone, Tissue,* ***Trauma****, Thrombin)*

* + *Patient Information: Maria was admitted to the OB unit for a scheduled induction at 37 weeks gestation for chronic hypertension.*
  + *History: 38 yr old G4P3, PPH with prior delivery, 104.5kg, allergic to PCN*
  + *Presentation: Induction for elevated blood pressures.*
  + *Vitals, lab data: B/P-147/86, RR-18, Temp-98.6, O2-100%, pulse-78*
    - *Admission labs; Hct: 32, plt: 200, hgb: 11.0*
    - *Hemorrhage risk assessment: High*
  + *Delivery information: Six (6) hour oxytocin induction with an epidural. Vacuum assisted vaginal delivery, third degree labial laceration repaired at the bedside, received Cytotec 800mcg rectally for a QBL of 600mL. Neonatal weight, 4000kg, Apgars 9 and 10.*

**Learning Objectives:** *(****Use the PPH Simulation Learning Objectives document to select objectives that meet your simulation goals.)***

When conducting the simulation, choose 3-4 of the below listed objectives.

<https://www.in.gov/health/ipqic/files/pph-simulation-learning-objectives.pdf>

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| --- | --- | --- |
| Cognitive | Technical | Behavioral |
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**Expected Duration:** *Approximately 30 minutes*

* 1. *10-minute sim*
  2. *20-debrief*

**Determine Roles** *(nurses, providers, other disciplines, family member/friend, etc.):*

***(Select roles based on your facility availability.)***

* Primary OB RN
* Charge RN
* OB Techs/Clerks
* OB Provider
* Laboratory
* OR Team
* Rapid Response Team
* Respiratory Therapy
* Anesthesia/CRNA
* House Supervisor
* OB Leadership
* Pastoral Care
* Blood Bank
* Family Member/Support Person

**Equipment/Supplies:**

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| --- | --- | --- |
| **Setting** | **Moulage** | **Manikin** |
| \_\_ ED \_\_ Triage  \_X\_ L&D \_\_ OR/PACU |  | \_X\_ Low Fidelity  \_\_ High Fidelity |

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| **Equipment** | | |
| \_\_EKG/HR \_\_ Arterial Line    \_\_ RR \_\_ PAP  \_X\_O2 Sat Probe \_\_ETCO2  \_X\_BP Cuff  O2 Mask | PIV Access  Yes\_X\_ or No\_\_  Gauge: \_\_18\_\_  Location/s:\_\_R AC & L FA\_\_\_\_ | Foley Catheter:  Yes \_X\_ or No\_\_  Tamponade Balloon / intrauterine vacuum device:  Yes X\_ or No\_\_  Scale: Yes  Rapid Infuser: Yes |

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| **Medications/ Fluids** | |
| Oxytocin (Pitocin) 10 units/ml  Carboprost (Hemabate) 15-methl  Prostaglandin F2a 0.25mg/ml  Methylergonovine (Methergine) 0.2 mg/ml  TXA | Albumin  LR |

**Pre-briefing:***This is a safe learning environment. This is not an individual assessment of performance. Our goal is to identify gaps in care; how can we make your job easier/more efficient. This is a time to practice and make mistakes.*

*Orient learners to the simulation room and OR. Go over*

* + *Orientation to equipment and space*
  + *Simulation is a safe place; won’t talk about specific learners; mutual respect (what happens in sim stays in sim)*
  + *We want you to treat this like a real patient scenario; “suspend all disbelief that you have about simulation”*
  + *May or may not want to share the medical emergency in advance*
  + *How to obtain VS, meds, equipment, etc. How to call providers/call for help.*
  + *Share the learning objectives.*
  + *Assign a leader and/or assign roles (can be facility specific and based on resources/personnel)*

**Scenario Progression:**

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| **Patient Initial State**  Alertness: drowsy B/P: 147/86 HR: 78 RR: 18  Pain scale: 0 epidural in place and infusing)  QBL: Immediately post-delivery-600mL  Other: Pt. currently states, “she is very tired.” RN performing ongoing fundal assessment for recovery, uterus firm at this time. 800 mcg of Cytotec given rectally and third degree lac. Repaired, hemorrhage cart outside the patient room. |

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| **Scenario Progression Outline** | | |
| *Timing* | *Patient Findings/Scripting* | *Expected Participant Behaviors/Interventions* |
| *2 minutes* | **Maria in bed complaining of feeling a large gush.** | **Perform fundal assessment**  **Assess vitals** |
| *2 minutes* | **Fundus is firm, lochia bright red and oozing**  **VS: 140/80, RR- 18, HR- 82, O2%-98** | **Perineal assessment**  **Perform QBL** |
| *2 minutes* | **Pt labia are asymmetrical, QBL- total 800 mL** | **Request additional personnel, Call provider to update, get additional orders, and request at bedside.** |
| *2 minutes* | **Provider at bedside performing perineal assessment.**  **VS: 110/62, RR-20, HR-100, O2% 95** | **RN requesting supplemental O2, requesting for provider equipment needs, requesting hemorrhagic medication, Perform QBL** |
| *2 minutes* | **QBL- total 850mL**  **Previous laceration well approximated, right labia has increased swelling.**  **Provider orders methergine** | **RN brainstorming on causes and next interventions.**  **RN verify hemorrhage medication order received from the provider based on cHTN.** |

**Debriefing: *(Use the PPH Simulation debriefing questions document)***

<https://www.in.gov/health/ipqic/files/pph-simulation-debriefing-questions.pdf>

**If a hemorrhage debriefing form is needed, one can be found in the Indiana toolkit:**

<https://www.in.gov/health/ipqic/files/Hemorrhage-Debrief-Form.pdf>