**Simulation Development Steps**

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

* + *Patient Information: A. R. is G2P2 37.2 weeks*
	+ *History: Gestational hypertension in previous pregnancy*
	+ *Presentation: IOL for gestational hypertension with Cytotec and Pitocin*
	+ *Vitals, lab data: B/P 146/88, HR 87, RR 15, SpO2 99%. B+ blood type, GBBS -, Hep B & C -, Hgb: 9.9, Hct: 27, Plts: 110K, ALT: 16, AST: 18, uric acid: 1.2, LDH: 200, +1 proteinuria*
	+ *Delivery information: AROM for 8 hours, total labor time 13.5 hours, successful VAVD 1 hour ago, PPH score updated to high risk, current QBL of 200 mL.*

**Learning Objectives:**

When conducting the simulation, use the PPH Simulation Learning Objectivesin the companion document to select 3-4 objectives that meet your simulation goals.

<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 RN
* Secondary RN/OB tech
* Provider OB/ED/CNM/FMP
* House Supervisor
* Optional: Lab, Blood Bank, RT, OR staff, Pharmacy
* Embedded Participants (EP): support person, off going RN, patient

**Equipment/Supplies:**

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| **Setting** | **Moulage** | **Manikin** |
| \_\_ ED \_\_ Triage\_\_ L&D \_\_ OR/PACUX\_ Postpartum | Fake blood (liquid, fabric with or without weights)*Bloody chux/pads* | X\_\_ Low Fidelity\_\_ High Fidelity |

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| **Equipment** |
| \_X\_EKG/HR \_\_ Arterial Line  \_X\_ RR \_\_ PAP\_X\_O2 Sat Probe \_\_ETCO2 \_X\_BP Cuff Other: *PPH cart & meds, Level 1, Blood warmer, warm blankets/Bair Hugger*  | PIV Access  Yes\_X\_ or No\_\_Gauge: \_18Location/s: AC  | Foley Catheter: Yes \_X\_ or No\_\_Tamponade Balloon / intrauterine vacuum device:Yes X\_\_ or No\_\_Scale: *QBL scales* |

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| **Medications/ Fluids** |
| PitocinCytotecMethergineHemabateTXA | LR/NSBlood products (PRBCs, Cryo, FFP) |

**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: alert, awake, oriented x 3 B/P: 146/88 HR: 87 RR: 15 Pain scale: 3Fetal HR: n/a Uterine Activity: n/a QBL: 200 Other:  |

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|  |
| *Timing* | *Patient Findings/Scripting* | *Expected Participant Behaviors/Interventions* |
| *2 minutes* | **Epidural wearing off; pt having more pain, rating 7/10** | **Implement pharm/non-pharm interventions for pain relief**  |
| *2 minutes* | **Uterus is boggy, fundal height 2 cm above umbilicus and deviated to the right** | **Routine fundal assessment/lochia****Empty bladder (I&O or indwelling per provider order)****Initiate fundal massage; continue QBL or reinitiate** |
| *2 minutes* | **Pt continues to have uterine atony and excessive bleeding with clots****QBL: 550 mL** | **Call for help; call provider for medication orders; initiate PPH protocol**  |
| *2 minutes* | **Provider orders medication**  | **Obtains appropriate medications based on patient history/assessments; demonstrates how to mix/prepare medication(s); administers in a timely fashion (can be verbalized)****Delegates appropriately****Continues QBL** |
| *2 minutes* | **VS: BP 125/78, HR 120, O2 95%, RR 22****QBL: 1500 mL****Uterine tamponade/intrauterine vacuum device ordered** | **Obtain and setup uterine tamponade/vacuum device in a timely manner****Advocate for MBTP initiation****Continue QBL** |

**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>