**Simulation Development Steps**

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

* + ***Patient Information:*** *Lucy Smith 37y.o.*
	+ ***History****: Pt is a G4P4 who delivered at 38 weeks following IOL for preeclampsia. Pt was on Pitocin for 23 hours with a therapeutic of 24. Pt was also on Magnesium Sulfate at a rate of 2gm/hr. Prenatal hx was unremarkable; dx of preeclampsia with this pregnancy; BPs 150s/90s. PSH/PMH unremarkable.*
	+ ***Presentation****: Pt delivered via SVD 30 minutes ago. She has been firm, +1 with moderate bleeding. She has a first-degree tear that was repaired. She is due for her second 15-minute check now. I cleaned her up following her last check.*
	+ ***Vitals, lab data****: Current vitals: HR 118; BP 110/60; spO2 95%; Temp 36.9; RR 18. Labs: Hgb 9.8; Hct 29; Plt 120s*
	+ ***Delivery information****: Pitocin IOL for preeclampsia at 38 weeks. SVD first degree with repair. QBL at delivery was 360. She received an epidural at 5cm and was comfortable throughout the delivery. Delivered a vigorous baby boy.*

**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 objectives in the companion document.

<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
	+ Charge RN
	+ Laborist/OB
	+ Anesthesia/ CST
	+ Additional RN(s)
	+ Blood Bank, Pharmacy (include roles, as needed)
	+ EP: off going RN; patient; support person(s)

**Equipment/Supplies:**

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| **Setting** | **Moulage** | **Manikin** |
| \_\_ ED \_\_ Triage\_X\_ L&D \_\_ OR/PACU | BabyFake blood/clots (liquid or fabric)Bloody pad/chux pad/linens | \_X\_ Low Fidelity\_\_ High Fidelity |

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| **Equipment** |
| \_X\_EKG/HR \_\_ Arterial Line  \_\_ RR \_\_ PAP\_X\_O2 Sat Probe \_\_ETCO2 \_X\_BP Cuff Other: PPH cart stocked with all supplies in drawers and recorder sheets, cognitive aids also available on cart  | PIV Access  Yes\_X\_ or No\_\_Gauge: \_18g\_\_\_Location/s:\_RFA\_\_\_\_\_ IV Pump Rapid InfuserFluid Warmer | Foley Catheter (red rubber): Yes \_X\_ or No\_\_Tamponade Balloon / intrauterine vacuum device:Yes \_X\_ or No\_\_Scale:on cart/in roomUrinometer for Bakri |

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| **Medications/ Fluids** |
| MethergineHemabatePitocin (IM and PIV)CytotecTXA | Blood Products |

**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: B/P: 110/60 HR: 118 RR: 18 Pain scale: 4Fetal HR: n/a Uterine Activity: n/a QBL: 360 Other: feeling faint/lightheaded, lots of pressure, pale |

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| **Scenario Progression Outline** |
| *Timing* | *Patient Findings/Scripting* | *Expected Participant Behaviors/Interventions* |
| *2 minutes* | **Perform 2nd 15-minute fundal check****120; 108/55; 19; 95%** | **Note the uterus is boggy; observe blood/clots****Recognize change in vitals** |
| *2 minutes* | **Call for help; continue continuous fundal massage** | **Additional staff bring in PPH cart/med kit****Charge RN--Call for provider/ anesthesia** |
| *2 minutes* | **Provider at bedside takes over bimanual fundal massage and orders medications****Charge or 2nd RN delegate roles****122; 96/52; 22; 93%****QBL 350** | **Medication RN starts to pull up medications****2nd RN start 2nd IV and bolus fluids****3rd RN performs QBL and communicate totals****Primary RN applies O2 via non-rebreather** |
| *2 minutes* | **Patient starts to feel worse and is ℅ being cold****Patient continues to hemorrhage QBL 820****125; 80/60; 22; 92%** **Provider initiates MBTP** | **Runner brings in warm blankets; Bair hugger****Continue to administer medications****Provider requests tamponade or suction****Charge RN notifies Surgical Team (anesthesia, CST, etc.) of patient status****2nd RN calls for MBTP** |
| *2 minutes* | **Patient continues to hemorrhage despite medications and tamponade or suction** | **Provider places tamponade or suction****Blood products are delivered****Move patient to OR**  |

**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>